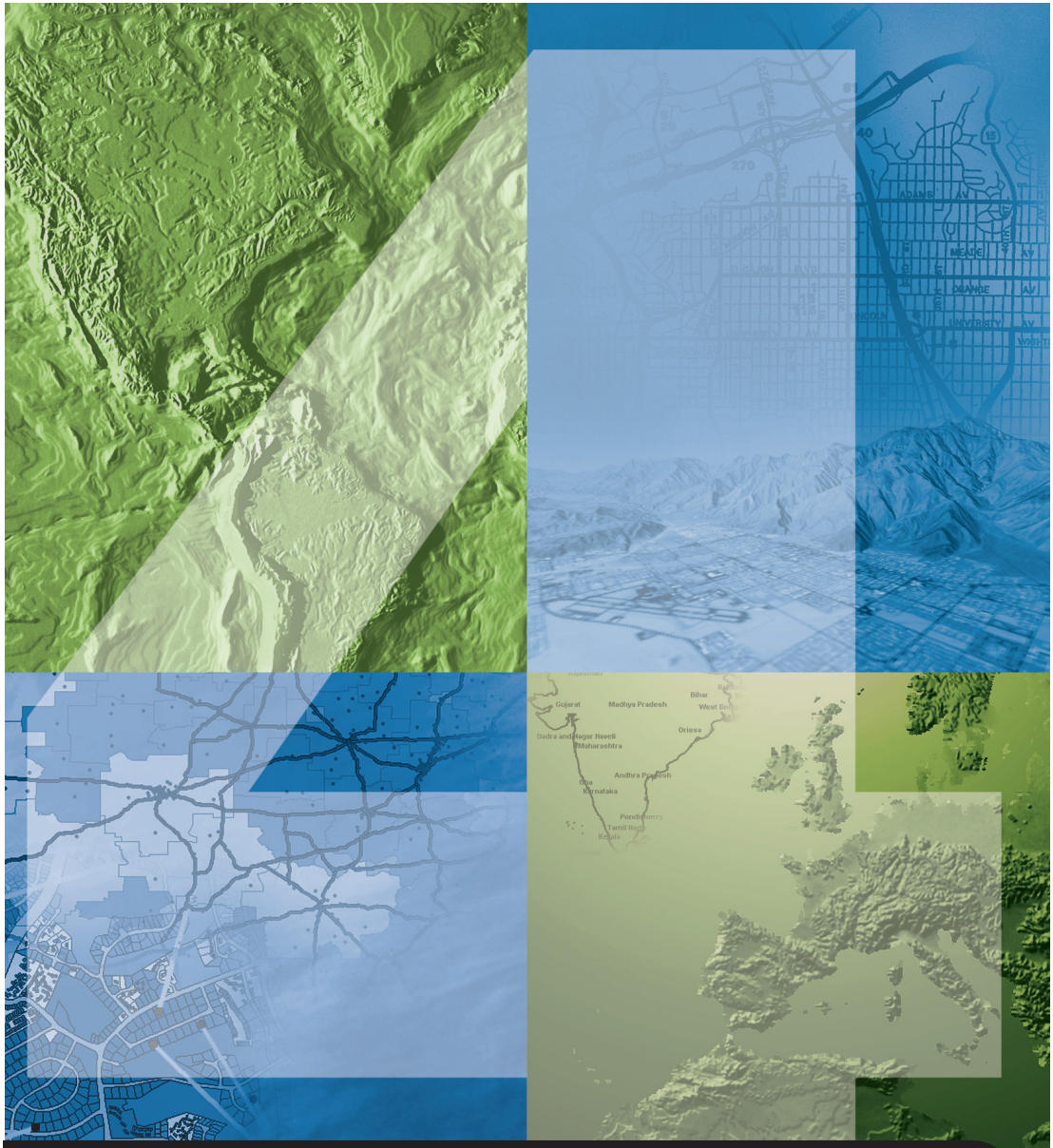


ArcIMS® 4.0.1 Installation Guide

Windows®

ESRI ArcGIS™

Introduction

ESRI® ArcIMS® is Internet Map Server (IMS) software for authoring, designing, publishing, and administering Internet mapping applications. ArcIMS allows Web clients, map servers, data servers, and the Web server to communicate with one another.

Use this guide to get ArcIMS up and running. If you are new to ArcIMS, start with the installation for your platform and install the features that have been preselected; referred to as a typical installation. A typical installation is when your Web site uses the resources of one computer; Web server software and ArcIMS are installed on the same computer. This configuration is useful for those with limited resources or light server loads. Once you are familiar with ArcIMS, use this guide to help define your site configuration and install ArcIMS on a distributed system.

This book assumes you have a Web server and servlet engine installed and operational and know how to administer the Web server, stop and start services/daemons, and create virtual directories. It also assumes knowledge of the Internet and related terminology.

Overview

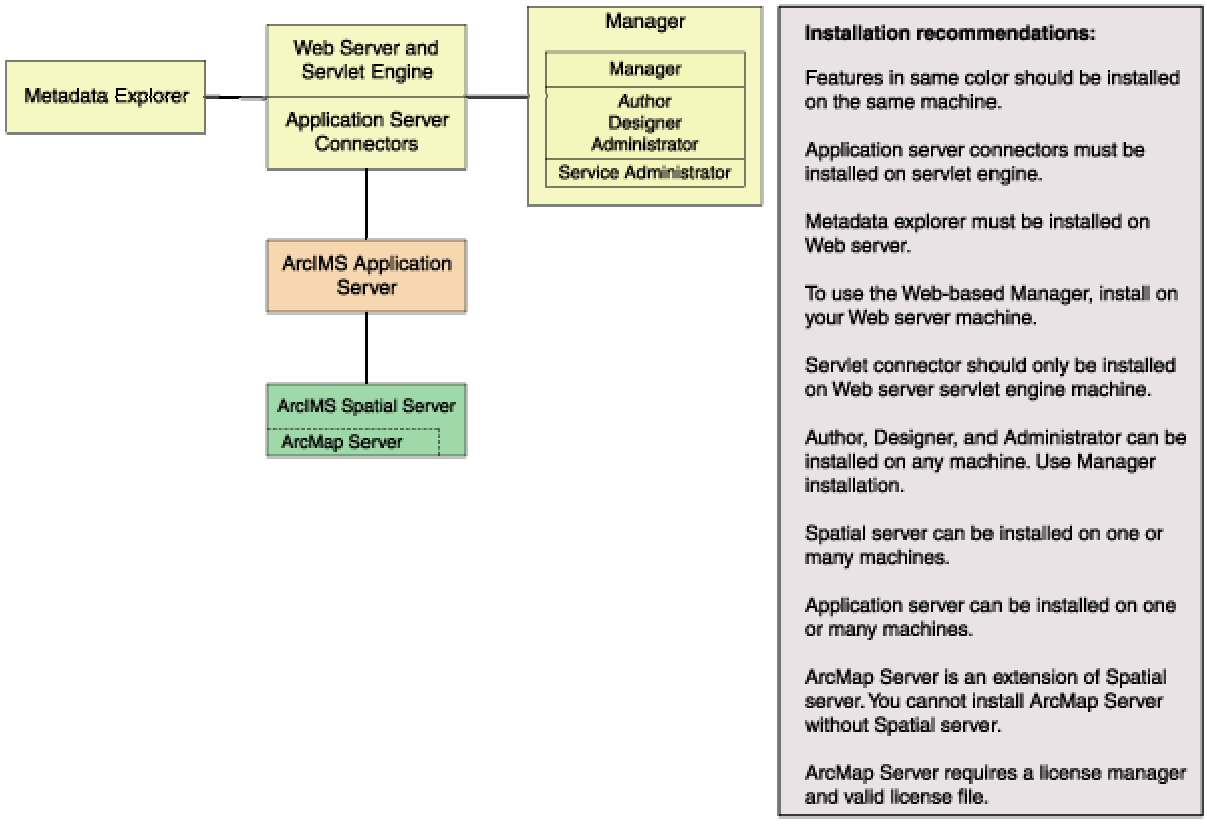
What's included with ArcIMS 4.0.1?

- The installation CD with ArcIMS software. See Using ArcIMS for details on working with ArcIMS. To find out about ArcIMS customization, see Customizing ArcIMS, a five-book series you can install with the software. The ArcXML Programmer's Reference Guide, a programming guide for customizing map configuration files, is also included with the software. For a printable version of Installing ArcIMS, see ArcIMS online at http://support.esri.com for a PDF for your platform.
- Documentation for ArcIMS is included on the ArcIMS CD in the Documentation folder. Documentation is also installed with ArcIMS under <ArcMS installation directory>/Documentation. Additional documentation, the Customizing ArcIMS series and the ArcXML Programmer's Reference Guide, are also available for installation
- ArcExplorer™—Java™ Edition is included on the ArcIMS CD and is documented in Using ArcExplorer—Java Edition. To install ArcExplorer—Java, run AEJavaSetup.exe located on the ArcIMS CD.
- ServletExec 4.1.1 is included on the ArcIMS CD under the ServletExec folder. See the ServletExec readme and the ServletExec installation guide, located in this folder, for information on installing ServletExec.
- ArcSDE® for Coverages is included with ArcIMS and comes with two digital documents: Installing ArcSDE for Coverages and ArcSDE for Coverages Administration Guide. ArcSDE for Coverages can be used without any special licenses or keycodes. Refer to the ArcSDE for Coverages CD for information. Installing ArcSDE for Coverages is optional.
- **Note:** The digital books included with ArcIMS are in PDF. To view and print PDF files, you will need to install the Adobe Acrobat Reader. Visit the Adobe Web page at www.adobe.com to download Adobe Acrobat Reader.

ArcIMS components

ArcIMS is made up of:

- ArcIMS Manager/Manager Applications
- ArcIMS Application Server
- ArcIMS Application Server Connectors
- ArcIMS Spatial Servers
- ArcIMS Service Administrator
- ArcIMS Viewers



Each component is described in the following paragraphs.

See the discussion of architecture in *Using ArcIMS* for more detailed information on ArcIMS components.

ArcIMS Manager

The ArcIMS Manager provides the Web-based interface and supports the three main tasks you perform in ArcIMS—author ArcIMS services, design Web pages, and administer sites. As a Web interface, ArcIMS Manager also allows remote site management.

ArcIMS Manager resides on the Web server computer and can be accessed remotely via the Internet using the Microsoft® Internet Explorer Web browser. Remote access to ArcIMS Manager requires a one-time Remote Manager download to the remote computer. See the Installing ArcIMS Remote Manager section for instructions regarding Remote Manager.

ArcIMS Manager is supported only on Windows® using Internet Explorer. It is not supported on HP®-UX®, IBM® AIX®, Linux® Red Hat®, or Sun™ Solaris™, and it is not supported on Windows using Netscape Communicator™. This is because Netscape Communicator does not currently support scripting of applets—a feature that is critical for ArcIMS Manager.

ArcIMS Manager applications

The ArcIMS Manager applications—Author, Designer, and Administrator—are also provided as independent applications that run outside a Web browser. They are included with a Manager installation and can be installed on any computer.

ArcIMS Service Administrator

The ArcIMS Service Administrator is a remote site administration tool and can be used as an alternative to or in conjunction with ArcIMS Administrator. The ArcIMS Service Administrator uses the JavaServer™ Pages (JSP) tag libraries and the Java API of the ArcIMS Java Connector.

The ArcIMS Service Administrator is installed with a typical installation, a Manager installation on Windows, and with a typical installation and ArcIMS Manager applications installation on UNIX.

The ArcSDE Services Monitor is also available to administer ArcSDE. To administer ArcSDE on Windows or Solaris, an installation of the optional ArcSDE Services Monitor component on the ArcSDE Server is required; on other flavors of UNIX, a custom installation of the ArcSDE Services Monitor is required on the ArcSDE Server. The ArcIMS Service Administrator presents a unified interface for managing ArcIMS and ArcSDE services.

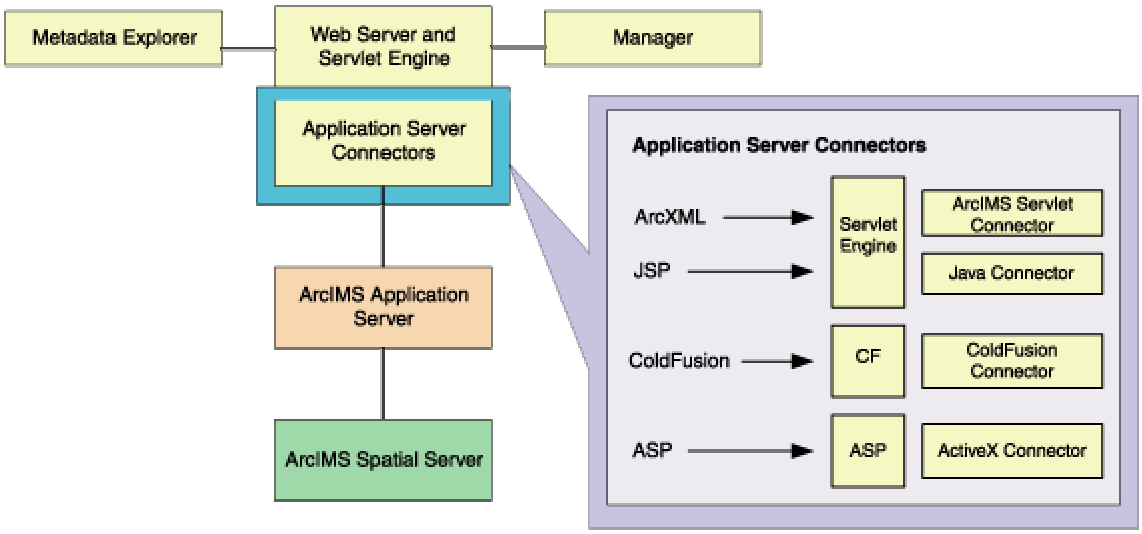
See *Using ArcIMS,* 'Using ArcIMS Service Administrator,' for details on using ArcIMS Service Administrator.

ArcIMS Application Server

The ArcIMS Application Server handles the incoming requests and tracks which ArcIMS services are running on which ArcIMS spatial servers. The ArcIMS Application Server hands off a request to the appropriate spatial server. The Application Server is written as a Java application and runs as a Windows service or a daemon process (on UNIX). It may reside on any computer.

ArcIMS Application Server Connectors

The ArcIMS Application Server Connectors are used to connect the Web server to the ArcIMS Application Server. Each instance of a connector is dedicated to one Web server and must be installed on the same computer as the Web server; however, a single Web server can support several connectors.



The ArcIMS Servlet Connector is the standard connector used for ArcIMS, and it supports the OpenGIS Consortium (OGC) Web Map Service (WMS) 1.1.0 implementation specification. It uses the ArcIMS language, ArcXML, to communicate from the Web server to the ArcIMS Application Server. The ArcIMS Servlet Connector provides Map Service-level user password authentication. You need the ArcIMS Servlet Connector to administer your ArcIMS site and author and design ArcIMS Web pages.

In addition to the ArcIMS Servlet Connector, you can use the following connectors to link the Web server to the ArcIMS Application Server:

- ColdFusion® Connector
- ActiveX® Connector
- Java Connector

The ColdFusion and ActiveX connectors work with custom clients and translate their own languages into ArcXML. The ArcIMS—Java Connector communicates with the ArcIMS Application Server via a Java application or JSP client. Samples can be installed with the software. For more information on these custom connectors, see the *Customizing ArcIMS* series.

The ArcIMS—Java Connector runs on Windows and UNIX; the ColdFusion Connector runs on Windows and Solaris, and the ActiveX Connector runs on Windows only.

After installation, see ArcIMS Servlet Connector in ArcIMS Help for information on the ArcIMS Servlet Connector and WMS. See *Customizing ArcIMS—ColdFusion Connector* for information on using the ColdFusion Connector. See *Customizing ArcIMS—ActiveX Connector* for information on using the ActiveX Connector. For JSP Connector information, see *Customizing ArcIMS—Java Connector*.

ArcIMS Spatial Server

The ArcIMS Spatial Server is the backbone of ArcIMS. ArcIMS spatial servers process requests for maps and related information and serve the data to the client. For ArcIMS Metadata Service, ArcGIS™ and ArcSDE are required.

ArcMap Server installs ArcObjects™ runtime files. ArcMap Server only runs on Windows platforms. ArcIMS Spatial Servers run on a Windows NT® Server, Windows NT Workstation, Windows 2000, Windows XP, or UNIX. A graphics card is not required.

Note: ArcMap Server cannot reside on the same computer as ArcGIS Desktop and/or ArcInfo™ Workstation.

ArcIMS Viewers

ArcIMS provides clientside viewers:

- ArcIMS HTML Viewer
- ArcIMS—Java Viewer
- Metadata Explorer

The ArcIMS Viewers determine the functionality and graphical look of your Web site. The viewer is what appears in the Web browser when someone accesses your Web site.

The Java Viewers require a one-time ArcIMS Viewer download to the client user's computer, and are only compatible with Web browsers that support Java plug-in functionality. See the Installing ArcIMS Viewer section for instructions regarding the Java client download.

The Metadata Explorer can only be used to view metadata from an ArcIMS Metadata Service. The Metadata Explorer can be installed by selecting this feature during the ArcIMS installation. See *Creating and Using Metadata Services* for information on Metadata Explorer.

Five steps to get ArcIMS up and running

There are five steps required to get ArcIMS running

1. Verify that your site meets ArcIMS system requirements.
2. Determine your ArcIMS site configuration.
3. Install ArcIMS. This includes the installation and post installation setup.
4. Configure your Web server.
5. Configure ArcIMS.

These steps are outlined below.

For the latest requirements or for any changes to the Installation Guide, see the Readme.html file on ArcIMS Online at http://support.esri.com

What you need to get ArcIMS running

Step 1: Verify that your site meets ArcIMS system requirements

Hardware configuration

- Memory requirements
- Disk space

System software

- Operating system
- Web server
- Servlet engine
- Java 2 Platform Standard Edition Runtime Environment (J2SE JRE)
- Web browser

Step 2: Determine your ArcIMS site configuration

- ArcIMS Typical Configuration—All on a single computer
- ArcIMS Custom Configuration—ArcIMS Application Server Connectors
- ArcIMS Custom Configuration—ArcIMS ArcMap Server (Windows only)
- ArcIMS Custom Configuration—ArcIMS Manager Applications
- ArcIMS Custom Configuration—ArcIMS Service Administrator
- ArcIMS Custom Configuration—ArcSDE Services Monitor
- ArcIMS Custom Configuration—ArcIMS Spatial Servers
- ArcIMS Custom Configuration—Metadata Explorer

Step 3: Install ArcIMS

- Step 3a—Complete the installation for the features you select.
- Step 3b—Complete the post installation setup for the features you installed.

Step 4: Configure your Web server

Step 4 is required if you did not configure your Web server, using the Web Server-Servlet Engine Configuration option, in the post installation (Step 3b).

- Configure your Web server and servlet engine.
- Create virtual directories.

Step 5: Configure ArcIMS

- Set environment parameters.

See the installation flowchart for an overview of the steps required to get ArcIMS running.

Questions, feedback, and information

Questions and feedback

ArcIMS Help provides information on how to contact ESRI Technical Support with questions or comments.

All questions and comments should be forwarded to ESRI Technical Support.

- Phone 909-793-3774.
- Fax 909-792-0960.
- E-mail support@esri.com.
- Hours 6:00 a.m to 6:00 p.m. Pacific time, Monday through Friday, except ESRI holidays. If you are outside the United States, please contact your local ESRI distributor.

ArcIMS Knowledge Base

The ArcIMS Knowledge Base is a database that contains

- Frequently asked questions
- How to instructions
- Troubleshooting tips
- Error messages

You can search the Knowledge Base using keywords, or you can browse through folders that contain information on different topics relating to ArcIMS.

You can access the ArcIMS Knowledge Base from the ESRI Online Support Center at http://support.esri.com/products/default.asp?p=6.

Using ArcIMS Help

If you need more information about a specific topic or procedure, use ArcIMS Help from within ArcIMS. You can locate what you need by searching the table of contents, finding terms in the index, or finding the number of times a term appears in a section.

Visit the ESRI home page on the Internet

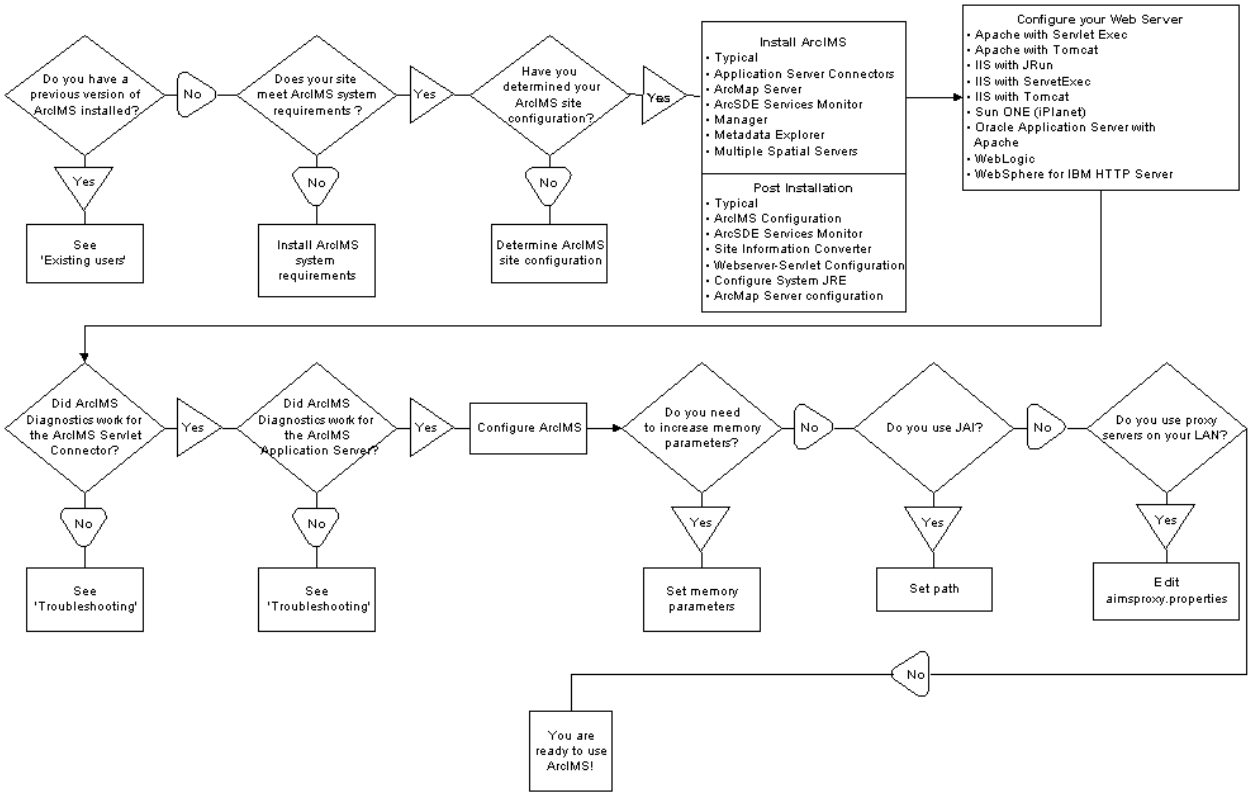
Visit the ESRI home page at www.esri.com for up-to-date information on ESRI software and services. It is an invaluable resource in helping you expand your understanding of geographic information system technology and Internet mapping.

Visit the ArcIMS home page at www.esri.com/software/arcims for the latest information about ArcIMS including a showcase of ArcIMS-enabled Web sites.

ESRI education solutions

ESRI provides educational opportunities related to geographic information science, GIS applications, and technology. You can choose among instructor-led courses, Web-based courses, and self-study workbooks to find education solutions that fit your learning style and pocketbook. For more information, go to www.esri.com/education.

Installation flowchart



The license manager

About the license manager

An ArcMap Server keycode is required to install ArcIMS ArcMap Server. No other ArcIMS features require an ArcGIS license manager. If you do not have a keycode, you will need to get one from customer service. See Obtaining a license file for further information.

ArcIMS and ArcGIS licenses can be served from either a Windows or UNIX license manager. For example, a Windows installation of ArcIMS ArcMap Server can obtain a license from either a Windows or UNIX 8.x license manager. For more information on sharing licenses across platforms, see the License Manager's Reference Guide, LicenseManagerGuide.htm, available in the documentation folder on the ArcIMS CD. After installing the license manager, this guide is also available at Start > Programs > ArcGIS > License Manager > License Manager Reference Guide or in the installation folder, typically \Program Files\ESRI\License\Documentation\
LicenseManagerGuide.htm.

See the topic, ArcMap Server Configuration for license manager installation information.

Obtaining a license file

A license manager is required to install ArcIMS ArcMap Server. The license manager can run either on a Windows or UNIX server regardless of where you installed the software.

If you intend to run the license manager on a Windows server, you need a SentinelPro hardware key on that Windows server. You only need one hardware key per license manager per network. You can use your existing hardware key and license manager if you have one.

In the United States, request new keycodes on the Internet at www.myesri.com. Outside the United States, contact your local ESRI Distributor. For the number of your distributor, call ESRI at 909-793-2853, ext. 1-1235 or visit our Web site at www.esri.com and click Outside the United States.

Note: The license file is provided to you as an attachment to an e-mail. Save the attachment as a text (.txt) file on your computer without opening it. Opening the attachment with Microsoft Word may corrupt your license file and adversely affect the license manager installation and operation.

Installing the license manager

ArcIMS ArcMap Server requires an ArcGIS License Manager. The same license manager can be used for other ESRI software products such as ArcInfo Workstation and ArcGIS Desktop.

Note: ArcIMS and ArcGIS licenses can be served from either a Windows or UNIX license manager. For example, a Windows installation of ArcIMS ArcMap Server can obtain a license from either a Windows or UNIX 8.x license manager. For more information on sharing licenses across platforms, see the License Manager Reference Guide, LicenseManagerGuide.htm, available in the documentation folder on the ArcIMS CD. After installing the license manager, this guide is also available at Start > Programs > ArcGIS > License Manager > License Manager Reference Guide or in the installation folder, typically \Program Files\ESRI\License\Documentation\LicenseManagerGuide.htm.

The License Manager can be installed on a machine where ArcMap Server will be run or on a machine where only the license manager will be installed. Other ArcGIS installations can point to that license manager during the installation process.

To install the license manager on a dedicated license server machine

1. Verify license manager requirements

FLEXlm communicates through TCP/IP, which must be installed and functioning properly on any Windows or UNIX license server. TCP/IP requires either a network card along with its drivers or the Microsoft Loopback Adapter on your Windows workstation.

Checking for TCP/IP

Microsoft Windows NT

Click Start > Settings > Control Panel, double-click Network, and select the Protocols tab. There should be a listing for TCP/IP.

Microsoft Windows 2000

Click Start > Settings > Control Panel, double-click Network and Dial-up connections, double-click Local Area Connection, and click Properties. There should be a listing for TCP/IP.

Microsoft Windows XP

Click Start > Control Panel, double-click Network and Internet Connections, single-click Network Connections, double-click Local Area Connection, and click Properties. There should be a listing for TCP/IP.

Checking for a network card or Microsoft Loopback adapter

Microsoft Windows NT

Click Start > Settings > Control Panel, double-click Network, and select the Adapters tab.

Microsoft Windows 2000

Click Start > Settings > Control Panel, double-click System, choose the Hardware tab, click the Device Manager button, and expand Network Adapters.

Microsoft Windows XP

Click Start > Control Panel, double-click Performance and Maintenance, single-click System, select the Hardware tab, click Device Manager, and expand Network Adapters.

Setting up the Microsoft Loopback adapter

Microsoft Windows NT

Click Start > Settings > Control Panel. Double-click Network. Select Adapters. Click Add and select MS Loopback Adapter from the Network Adapter List. Click Have Disk and put your Windows NT CD into your CD drive and type in the correct drive letter.

Microsoft Windows 2000

Click Start > Settings > Control Panel. Double-click Add/Remove Hardware. Click Add/Troubleshoot a device, and click Next. Click Add a new device, and click Next. Click No, I want to select the hardware from a list, and click Next. Click Network Adapters and click Next. In the Manufacturer's box, select Microsoft. In the Network Adapter box, click Microsoft Loopback Adapter. Click Finish.

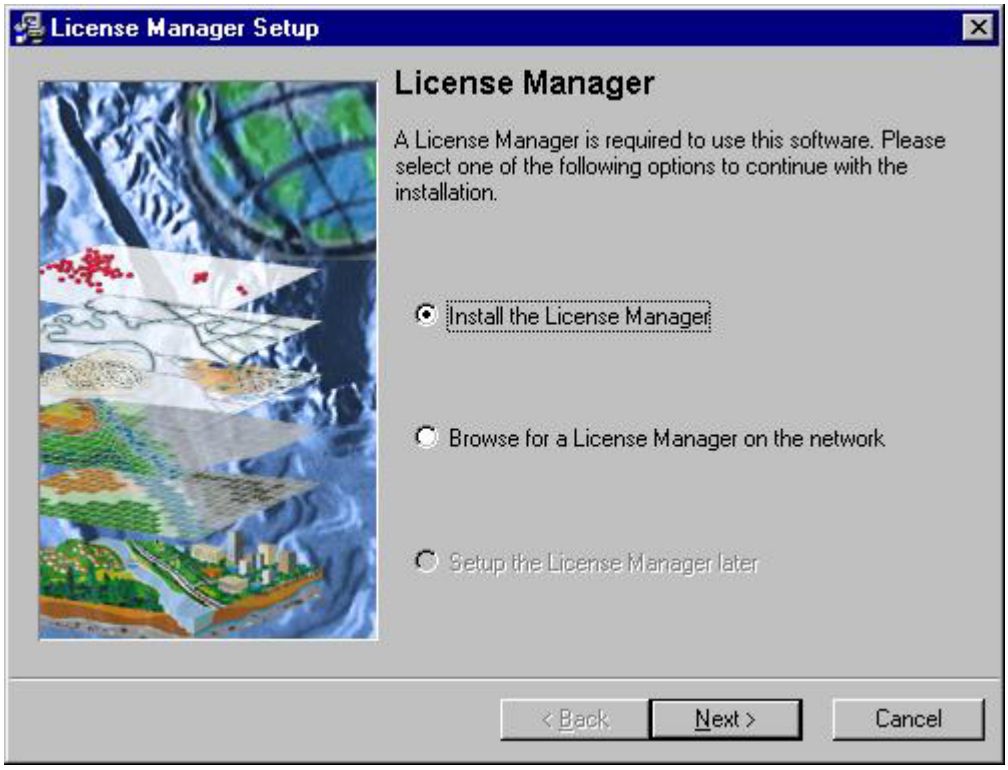
Microsoft Windows XP

Click Start > Control Panel > Printers and Other Hardware. Click Add Hardware, and click Next. Select "Yes, I have already connected the hardware" and click Next. Select Add a new hardware device, and click Next. Select Search for and install the hardware automatically, and click Next. Select Network Adapters, and click Next. In the Manufacturer box, select Microsoft. In the Network Adapter box, click Microsoft Loopback Adapter and click Next. Click Next and Finish.

2. Install license manager

Launch the license manager setup, LMSetup.exe, from the LicenseManager folder located on your ArcIMS 4.0.1 CD.

Select the first option, Install the License Manager.



During the license manager installation you will be prompted for the location of your license file. This refers to the license file you received from ESRI customer service. Once you have completed the license manager installation, you can supply the license manager information to those users installing ArcIMS ArcMap Server. They can browse to this network license manager when prompted for the license manager machine during their installation.

Existing users

ArcIMS 3.0 users

- WARNING: You will need to set up you ArcIMS site from scratch. (For example, the J2SE JRE version will be updated during the post installation setup to 1.4.0, or you may manually update J2SE JRE to a supported version. You will not be able to use existing .ser files.)
- Uninstall ArcIMS 3.0 using Add/Remove in the Control Panel.
- Remove all files from the installation directory that were not removed during uninstall
- Remove all ArcIMS jar files located in the <J2SE JRE installation directory>\lib\ext

ArcIMS 3.1 users

ArcIMS 3.1 users should perform the following:

- The ArcIMS 3.1 serialized files EsriMapCatalog.ser (configuration file for saved services) and EsriMapCookies.ser contain your ArcIMS preferences. Copy these files to a directory outside the ArcIMS Installation Directory prior to the ArcIMS 4.0.1 installation. The ArcIMS 4.0.1 post installation setup provides an option to convert your ArcIMS 3.1 serialized files to the files, ArcIMSSite.sez and ArcIMSFolders.sez, with the Site Information Converter.
- If you don't run the Site Information Converter utility during the ArcIMS installation (available in the post installation setup), you can run it manually. See ArcIMS Site Information Converter.
- You cannot have ArcIMS 3.1 and ArcIMS 4.0.1 installed on the same computer. Uninstall ArcIMS 3.1 before installing ArcIMS 4.0.1. We recommend you launch the ArcIMS 4.0.1 setup to uninstall ArcIMS 3.1, or see your ArcIMS 3.1 installation guide for more information on uninstalling ArcIMS 3.1.
- Make sure the ArcIMS 3.1 Esrimap_prop file is deleted from your computer before installing ArcIMS 4.0.1. Search your computer and delete this file.
- The ArcIMS installation directory is now by default C:\Program Files\ArcGIS followed by an ArcIMS directory. Update your virtual directories (especially for Manager) to reflect the new directory name. See Step 4: Configuring your Web server for your configuration.
- You will need to update your J2SE Java Developer Kit (JDK) or J2SE JRE to a supported version. The post installation setup can do this for you.
- See ArcIMS System Requirements at http://arconline.esri.com/arconline/sysreqs.cfm?PID=6 for Web servers and servlet engines supported for ArcIMS 4.0.1.

See 'What's new with ArcIMS' in ArcIMS Help for information on the differences between ArcIMS 3.1 and ArcIMS 4.0.1.

ArcIMS 4.0 users

ArcIMS 4.0 users should perform the following:

- You cannot have ArcIMS 4.0 and ArcIMS 4.0.1 installed on the same computer. Uninstall ArcIMS 4.0 before installing ArcIMS 4.0.1. We recommend you launch the ArcIMS 4.0.1 setup to uninstall ArcIMS 4.0, or see your ArcIMS 4.0 installation guide for more information on uninstalling ArcIMS 4.0.
- Your .sez files will not be removed during uninstall, they will remain under <ArcIMS Installation Directory>/ArcIMS\appserver. If you plan on using the .sez files again, leave them in this location, or move them to your new <ArcIMS installation Directory>/ArcIMS/appserver. If you don't want to use these files, back them up or delete them before running the ArcIMS post installation setup.

- Back up files that have been customized, but not renamed (for example, in your C:\ArcIMS\Website directory).
- All other files that were not removed during uninstall of ArcIMS 4.0, will be updated by the ArcIMS 4.0.1 install (for example, jar files, registry entries).
- See ArcIMS System Requirements at http://arconline.esri.com/arconline/sysreqs.cfm?PID=6 for supported Web servers and servlet engines for ArcIMS 4.0.1.

Upgrading Metadata from ArcIMS 4.0 to 4.0.1

Your Metadata Service utilizes 10 tables in your relational database to store all metadata documents published to your service. At ArcIMS 4.0.1, the schema of some of these tables has changed to improve searching performance. Because of this change, you'll need to update the metadata tables in the database before starting your Metadata Service in ArcIMS 4.0.1. Don't worry. Performing this update will not delete any metadata documents published to your metadata database.

Follow the steps below to upgrade the tables.

1. Uninstall ArcIMS 4.0.
2. In ArcCatalog, connect to your database using the same connection information specified in your Metadata Service configuration file (e.g., MetadataService.axl).
3. Locate and delete the following four tables in the database. Deleting these tables will not delete any metadata documents published to your Metadata Service.
    - ImsmetadataTags
    - ImsmetadataValues
    - ImsmetadataWords
    - ImsmetadataWordindex

If you changed the table name prefix in your Metadata Service configuration file from the default value of Imsmetadata, your table names will be slightly different. Your tables will be named with your prefix instead of Imsmetadata, for example, <table_name_prefix>Tags, <table_name_prefix>Values and so on.

4. Install ArcIMS 4.0.1.
5. Start your Metadata Service. Your Metadata Service will start automatically if it was previously created and saved in the site startup file (ArcIMSSite.sez).
6. Run the indexing command, aimsmetaindx, with the indexAll option. This command is located in <ArcIMS Installation Directory>/Metadata/Commands. For information on how to run this command, see the section titled 'Indexing metadata documents' in Chapter 3 of *Creating and Using Metadata Services.*

Note: If you've already installed ArcIMS 4.0.1 but didn't delete the four database tables in Step 2 and 3 above, your existing Metadata Service will not start. Simply follow Steps 2 through 6 above and skip Step 4.

Upgrading the Gazetteer data from ArcIMS 4.0 to 4.0.1

The Gazetteer data distributed for use with Metadata Explorer has been upgraded for use with ArcIMS 4.0.1. If you had previously installed the Gazetteer data and imported the data into ArcSDE, you will need to delete the Gazetteer data from your database and reload it. The Gazetteer data has not changed except to implement the new database schema required for any Metadata Service.

If you attempt to start your Gazetteer Service at 4.0.1 and have not reloaded the new Gazetteer data, the service will not start. Follow the steps below to remove the Gazetteer data from your database.

1. Uninstall ArcIMS 4.0.

2. In ArcCatalog, connect to your database using the same connection information specified in your Gazetteer configuration file (e.g., Gazetteer.axl).
3. Locate and delete the following 10 tables in the database:

   Gazetteer

   GazetteerDeleted

   GazetteerDeletedRel

   GazetteerRelationships

   GazetteerThumbnails

   GazetteerTags

   GazetteerUsers

   GazetteerValues

   GazetteerWords

   GazetteerWordIndex
4. Install ArcIMS 4.0.1.
5. Load the Gazetteer data using the import scripts. See the topic called 'Loading the Gazetteer data' in Appendix A of *Creating and Using Metadata Services.*
6. Start your Metadata Service based on the Gazetteer data.

Note: If you've already installed ArcIMS 4.0.1 but didn't delete the Gazetteer data in Step 2 and 3 above, your existing Gazetteer Service will not start. Simply follow Steps 2 through 6 above and skip Step 4.

Step 1: Verify that your site meets system requirements

The following system requirements are required to run ArcIMS on Microsoft Windows computers.

Hardware configuration

Memory requirements

- Web server/Manager: 256 MB of RAM recommended
- ArcIMS Application Server: 256 MB of RAM recommended
- ArcIMS Spatial Server: 256 MB of RAM recommended per CPU
- HTML Viewers: 64 MB of RAM recommended
- Java Viewers and ArcExplorer—Java Edition: 128 MB of RAM recommended
- All components: 256 MB of RAM recommended per CPU

Disk space

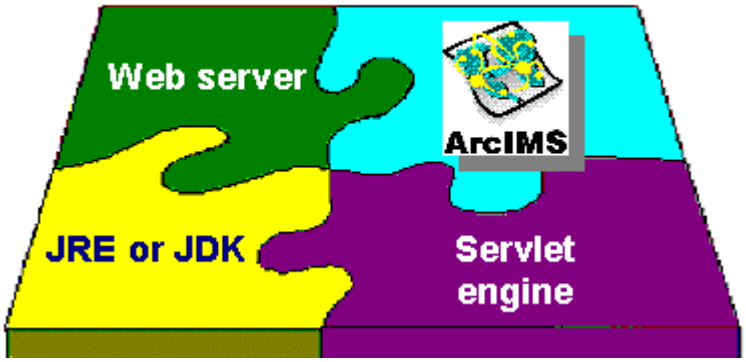
A Typical ArcIMS installation requires approximately 478 MB of NTFS (505 MB of FAT) disk space for program files and system files. If installing to a drive other than your system drive, 123 MB of this total of NTFS space (127 MB of FAT) will be required on your system drive for system files.

A Complete installation of ArcIMS requires approximately 827 MB of NTFS (864 MB of FAT) disk space. If installing to a drive other than your system drive, 224 MB of this total NTFS space (231 MB of FAT) will be required on your system drive for system files.

For the disk space requirements for each ArcIMS component, see the ArcIMS installation program on the CD.

System software

The following system software is required to run ArcIMS.



Operating system

- Microsoft Windows NT-Intel® 4.0 with Service Pack 6a, Windows 2000, or Windows XP (hereafter collectively referred to as Windows)

To determine if Service Pack 6a is installed on Windows NT:

Click Start > Run, type "Winver," and press Enter. If your system is running it, 'Revised Service Pack 6a' is listed in the About Windows NT screen.

Web server

ArcIMS works in conjunction with Web server software. A Web server must be installed and operational in order to start serving maps.

For information on setting up your Web server and servlet engine visit http://support.esri.com/search/KbDocument.asp?dbid=23450.

System administration access to the Web server computer is necessary, and knowing how to stop and start your Web server is mandatory.

ArcIMS is fully supported on these Web servers on Microsoft Windows computers:

- Apache Web Server using Jakarta–Tomcat installed as a service or ServletExec as its servlet engine
- IBM HTTP Server using WebSphere® as its servlet engine
- Sun ONE 6.0 (iPlanet)™ Web Server, Enterprise Edition, using its Native Java servlet engine
- Microsoft IIS for Windows NT Server, Windows 2000, and Windows XP using a servlet engine
- **Note:** Microsoft Personal Web Server is not supported.
- Oracle® Application Server (OAS) using Apache Web Server
- WebLogic®

See ArcIMS System Requirements at http://arconline.esri.com/arconline/sysreqs.cfm?PID=6 for other Web servers and their ESRI support level.

Servlet engine

ArcIMS requires a servlet engine if the Web server does not support servlets natively. For information on setting up your Web server and servlet engine, visit http://support.esri.com/search/KbDocument.asp?dbid=23450.

The servlet engine must use Java 2 Platform Standard Edition Runtime Engine (J2SE JRE) or Java 2 Platform Standard Edition Software Development Kit (J2SE JDK) 1.3.1 or higher.

- IBM WebSphere
- JRun for IIS using J2SE JDK instead of J2SE JRE available from www.macromedia.com/software/jrun
- Jakarta–Tomcat for Apache Web Server or IIS installed as a service available from www.apache.org (hereafter referred to as Tomcat)
- ServletExec™ for IIS available from the ServletExec folder on the ArcIMS CD or from www.newatlanta.com

See ArcIMS System Requirements at http://arconline.esri.com/arconline/sysreqs.cfm?PID=6 for other servlet engines and their ESRI support level.

Note: Servlet engine evaluation versions are not supported.

Java 2 Platform Standard Edition Java Runtime Environment

ArcIMS Manager and Java Viewers require a system registered Java 2 Platform Standard Edition Java Runtime Environment version 1.3.1 or higher. J2SE JRE versions 1.3.1_02 and 1.4.0 are supported for use with ArcIMS 4.0.1. A J2SE JRE does not have to be installed prior to installing ArcIMS, the post installation setup will provide you with the opportunity to install and configure a registered J2SE JRE version 1.4.0 system.

Note: J2SE JRE 1.3.1_03, 1.3.1_04 and J2SE JRE 1.4.0_01 are NOT recommended for use with ArcIMS 4.0.1.

Note: J2SE JRE is not needed if J2SE Software Development Kit (SDK) 1.3.1 or higher is installed on the computer.

For the latest information on ArcIMS system requirements, see ArcIMS System Requirements at http://arconline.esri.com/arconline/sysreqs.cfm?PID=6.

Additional system requirements

ArcIMS Service Administrator requirements

The following software is required to use the ArcIMS Service Administrator:

- Java 2 Platform Standard Edition Software Development Kit 1.3 or higher. The J2SE SDK is available from http://java.sun.com/j2se. Refer to your Web server documentation for supported J2SE SDK versions.
- **Note:** J2SE SDK versions 1.3.1_02 and 1.4.0 are supported for use with ArcIMS 4.0.1. J2SE SDK 1.3.1_03, 1.3.1_04, and J2SE SDK 1.4.0_01 are *not* recommended for use with ArcIMS 4.0.1.

ArcIMS Metadata Service requirements

The following software is required to use the ArcIMS Metadata Service:

- ArcGIS 8.3 or higher
- ArcSDE 8.3 or higher

ArcMap Server requirements

- Internet Explorer 5.0.1 or higher, and MDAC 2.5 is required for ArcIMS ArcMap Server. If you do not have Microsoft Data Access Components (MDAC) 2.5 or higher, the install will optionally let you install it. You must obtain and install Internet Explorer 5.0.1 or higher.

The following software is required to use the ArcMap Server:

- ArcGIS 8.2 or higher is needed to create the map documents that can be served in ArcIMS.
- ArcMap Server installs the required ArcObjects runtime files.

Note: ArcIMS ArcMap Server cannot be installed on the same machine as ArcGIS Desktop or ArcInfo Workstation. All other ArcIMS components can reside on a machine where ArcGIS Desktop or ArcInfo Workstation is installed; ArcMap Server is the only exception.

Metadata Explorer requirements

The following software is required to use the Metadata Explorer:

- Java 2 Platform Standard Edition Software Development Kit 1.3 or higher. The J2SE SDK is available from http://java.sun.com/j2se. Refer to your Web server documentation for supported J2SE SDK versions.
- **Note:** J2SE SDK versions 1.3.1_02 and 1.4.0 are supported for use with ArcIMS 4.0.1. J2SE SDK 1.3.1_03, 1.3.1_04, and J2SE SDK 1.4.0_01 are *not* recommended for use with ArcIMS 4.0.1.

Web browser for ArcIMS Manager

- Microsoft Internet Explorer 5.0, 5.5, or 6.0

Remote Manager requires a one-time download for the Java 2 Plug-in and ArcIMS files. See Installing ArcIMS Remote Manager for more information.

Web browser for ArcIMS Viewers

- HTML Viewer: Microsoft Internet Explorer 5.0, 5.5, or 6.0, or Netscape Communicator 4.75 or 6.0

The Java Viewers require that a one-time download including the Java 2 Plug-in and ArcIMS Viewer be installed.

- Java Standard Viewer: Microsoft Internet Explorer 5.0, 5.5, or 6.0, or Netscape Communicator 4.75

- Java Custom Viewer: Microsoft Internet Explorer 5.0, 5.5, or 6.0 only

Note: See ArcIMS System Requirements at http://arconline.esri.com/arconline/sysreqs.cfm?PID=6 for the latest support information.

ArcIMS Application Server Connectors

ArcIMS Application Server connectors require the following optional software if you will be creating custom Viewers using ColdFusion or ActiveX:

ActiveX Connector

- Web Server: Microsoft IIS 4.0 on Windows NT, IIS 5.0 on Windows 2000 and IIS 5.1 on Windows XP
- Development Environment: Microsoft Visual InterDev 6.0, SP3, or Visual Studio 6.0
- Internet Explorer 5.0.1 or higher is required for the ActiveX connector. (You must obtain and install Internet Explorer 5.0.1 or higher.)
- **Important Notes on the ActiveX connector:** The ActiveX Connector feature will install WinHTTP5 on the user's machine. The HTTP5 requirements are:

  Notes concerning Windows 2000:

  Service Pack 2 is recommended for Windows 2000. Furthermore, there are a few hotfixes not included in SP2 for Windows 2000 that may need to be applied:

  Q260649—"Error Message When You Use WebDav to Copy a Large File"

  http://support.microsoft.com/support/kb/articles/Q260/6/49.ASP

  This fix should be applied if hangs or other serious errors are encountered when making HTTPS requests.

  Q282865 – "Winsock Shutdown Can Increase CPU Usage to 100 Percent"

  http://support.microsoft.com/support/kb/articles/Q282/8/65.ASP

  This fix addresses a hang that may occur while terminating a multithreaded program that has sent HTTP requests.

  Notes concerning Windows NT 4.0:

  It is strongly recommend that a patch for CRYPT32.DLL be applied on Windows NT 4.0 platforms. The patch fixes a hang encountered when shutting down a process that has connected to a secure server using SSL. Please refer to the following URL for more information:

  http://support.microsoft.com/support/kb/articles/Q238/9/34.ASP

For ActiveX information, see *Customizing ArcIMS—ActiveX Connector.*

ColdFusion Connector

- ColdFusion Server Professional or Enterprise 4.5.1 or 5.0, and ColdFusion MX.
- Development Environment: ColdFusion Studio 4.5.1, 4.5.2, or 5.0

For ColdFusion information, see *Customizing ArcIMS—ColdFusion Connector.*

Java Connector

- Java 2 Platform Standard Edition Software Development Kit 1.3 or higher. The J2SE SDK is available from http://java.sun.com/j2se. Refer to your Web server documentation for supported J2SE JDK versions.
- **Note:** J2SE SDK versions 1.3.1_02 and 1.4.0 are supported for use with ArcIMS 4.0.1. J2SE SDK 1.3.1_03, 1.3.1_04, and J2SE SDK 1.4.0_01 are *not* recommended for use with ArcIMS 4.0.1.

For Java Connector information, see *Customizing ArcIMS—Java Connector*.

ArcSDE

The following versions of ArcSDE are supported by ArcIMS:

Metadata users only

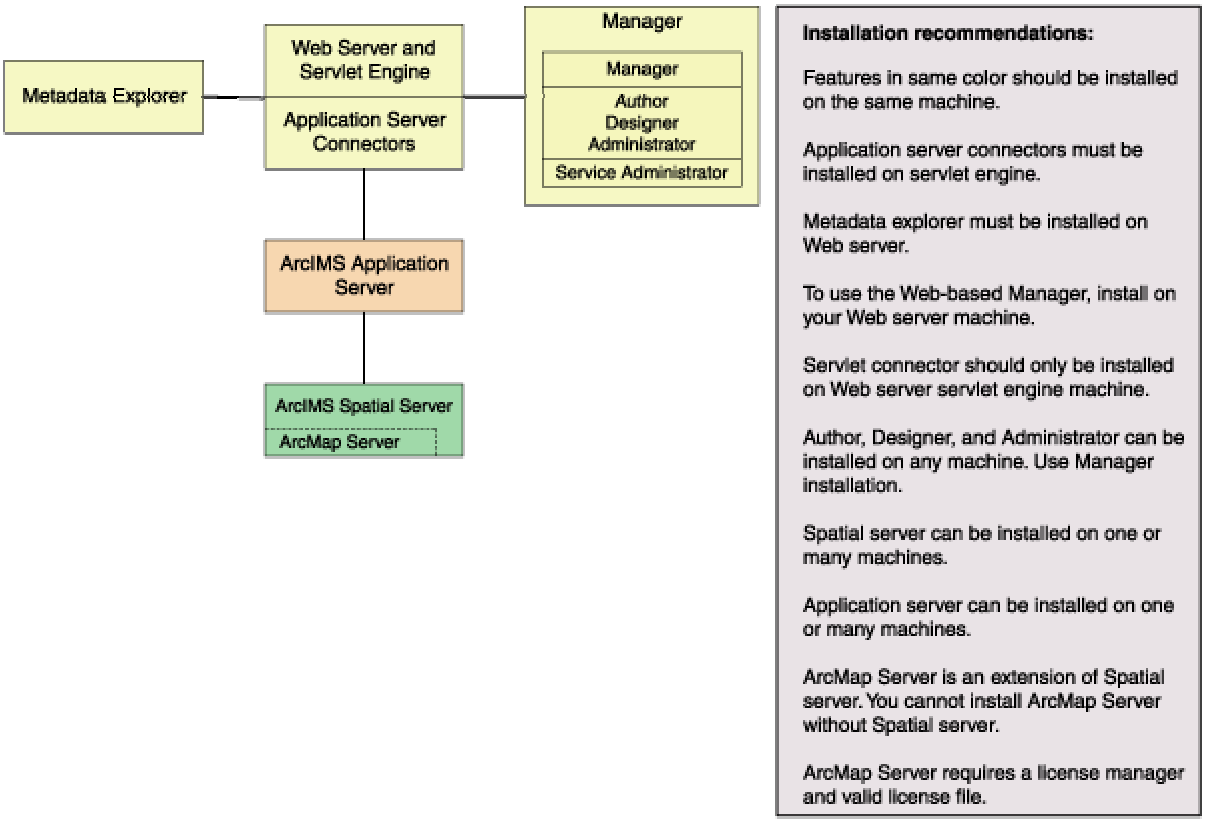
- ArcSDE 8.3 or higher

Other users

- ArcSDE 8.0.x, ArcSDE 8.1.x, ArcSDE 8.2, ArcSDE 8.3, or higher
- ArcSDE for Coverages 8.0.x, 8.1.x, 8.2, 8.3, or higher

Once you have the required software, see Step 2: Planning an ArcIMS site configuration.

Step 2: Planning an ArcIMS configuration for your site



Installation configuration diagram

Overview

The ArcIMS 4.0x architecture and functionality has been engineered specifically to serve geographic data and services on the Internet. The software is designed so that it is easy to create maps, develop Web pages that communicate with the maps, and administer the ArcIMS site. The software is also designed for distribution across a network and scalability as the demand for maps increases.

An ArcIMS site consists of one or more computers where the ArcIMS host (ArcIMS Manager [includes Manager, Manager Applications, and Service Administrator], Application Server Connectors, and ArcIMS Application Server), ArcIMS Spatial Servers, and data reside. The Application Server Connectors, ArcIMS Application Server, and ArcIMS Spatial Server are the components needed to create and manage services that process requests and responses. The ArcIMS framework also requires a Web server, Java Runtime Environment, and servlet engine. For more information on these components see the Overview topic of the install guide introduction.

The ArcIMS site management applications (Manager, Author, Designer and Administrator, and Service Administrator), provide access to ArcIMS components for authoring maps, administering ArcIMS services and Spatial Servers, and designing Web sites. If you want to use the Web-based manager, it is strongly recommended that Manager be installed on your Web server machine. The Manager applications (Author, Designer, and Administrator) can be used on any machine. A Manager installation will install Manager, Manager applications (Author, Designer, and Administrator), and Service Administrator.

There are many possible ArcIMS site configurations. Some sites run all ArcIMS components on a single computer, while other sites are comprised of multiple computers. Configurations will vary depending on the available computer resources and the mapping services provided. For ArcIMS Spatial Servers, processing speed and the ability to handle the load are important. Will the ArcIMS services perform process-intensive functions or create basic map displays? How many services will be created at one

time? Will the Web server computer be dedicated to the Web site or used for other purposes as well? Answers to these types of questions will assist in planning an ArcIMS site configuration.

Configure an ArcIMS site based on the anticipated number of simultaneous users visiting the site and the number of maps generated each day. For example, a Web site with few anticipated users, averaging 100 to 1,000 maps per day, could run from one computer. A high-volume Web site, with 100,000 to 1,000,000 maps per day, should be distributed to multiple ArcIMS Spatial Servers.

When planning your ArcIMS site configuration, there are some installation recommendations to take into account. The installation configuration diagram above illustrates ArcIMS installation features and some of the installation recommendations.

- The ArcIMS features in the installation configuration diagram, illustrated in the same color, should be installed on the same machine.
    - The Application Server Connectors must be installed on your Web server machine.
    - Metadata Explorer must be installed on your Web server machine.
    - To use Manager (the Web-based application used to author, design, and administer), it is recommended that Manager be installed on your Web server machine.
- The ArcIMS Servlet Connector should only be installed on the Web server machine.
- The Manager applications (Author, Designer, and Administrator) can be installed on any machine. To install these applications, perform a Manager installation. A Manager installation will install Manager, Author, Designe, and Administrator, and Service Administrator.
- Spatial Server can be installed on one machine or many machines. Each Spatial Server installation needs to know the name of the machine where the Application Server is installed. The post installation will prompt you for the name of the Application Server and edit the monitor.properties file accordingly. One Spatial Server cannot support multiple Application Servers, but one Application Server can support multiple Spatial Servers.
- Application Server can be installed on one machine or many machines. Each Application Server installation needs to know the name of the Web server. The post installation will prompt you for the name of the Web server and edit the site preferences and diagnostic property files.
- ArcMap Server is an extension of Spatial Server. You cannot install ArcMap Server without installing Spatial Server. A license manager and valid license file are required to install ArcMap Server. The license manager can be installed during the post installation of ArcMap Server, or you can use an existing license manager on your network.
- ArcSDE Services Monitor can exist on any machine where ArcSDE is installed.

ArcIMS background processes

There are three background processes (Windows services/UNIX daemons) associated with ArcIMS.

- ArcIMS Application Server 4.0.1. The Application Server service is installed with the ArcIMS Application Server.
- ArcIMS Monitor 4.0.1. The Monitor service is installed with Spatial Server and ArcSDE Services Monitor.
- ArcIMS Tasker 4.0.1. The Tasker service is installed with the ArcIMS Application Server.

Common site configuration scenarios

This section presents a series of common configuration scenarios that illustrate how to distribute various installation components across various computer platforms.

- ArcIMS Site on one machine
- Multiple ArcIMS spatial servers
- Dedicated Web server machine

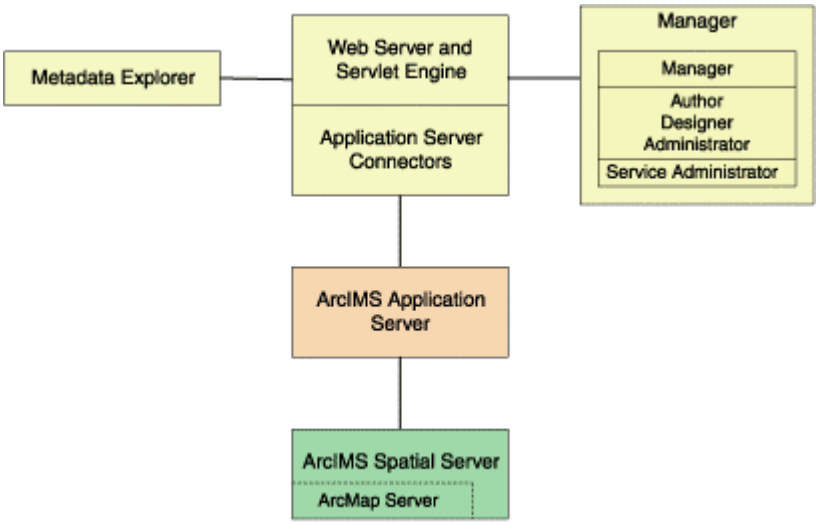
- Multiple application servers

ArcIMS site on one machine

The ArcIMS site must have a Web server configured and communicating with a servlet engine before installing ArcIMS.

The entire ArcIMS site on one machine is referred to as a typical installation. This installation consists of the ArcIMS host (ArcIMS Manager, Application Server Connectors, and ArcIMS Application Server) and ArcIMS Spatial Server installed on the Web server machine. A typical installation of ArcIMS will install Manager, the ArcIMS Application Server, the default ArcIMS Application Server Connector (the Servlet Connector), and the ArcIMS Spatial Server. Additionally, a typical ArcIMS installation will install Metadata Explorer and some selected samples and documentation.

This site configuration is useful for those with limited resources or light server loads. If you are new to ArcIMS, start with this site configuration.



See Performing a typical installation for steps on installing these ArcIMS components on the same computer. To include ArcMap Server, leave all installation features checked, and in addition check the box to install ArcMap Server.

Multiple ArcIMS Spatial Servers

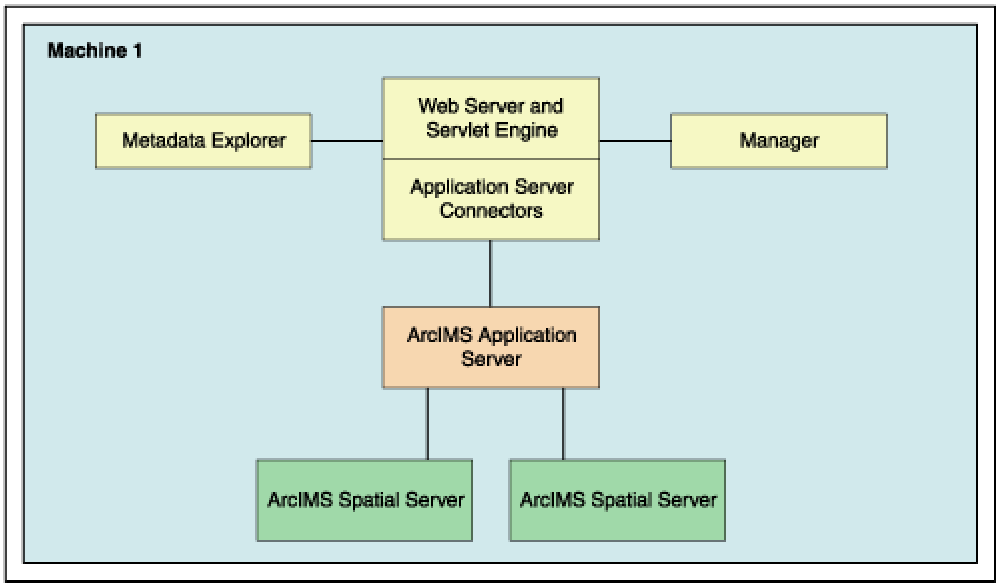
Additional ArcIMS Spatial Servers can be added to the ArcIMS site configuration, as the number of requests increases, if redundancy needs to be built in, or to optimize performance.

There is no one formula for determining how many ArcIMS Spatial Servers are needed. The Spatial Server configuration will vary among ArcIMS sites depending on the number and size of services, time required to process requests, number of requests, Web and network traffic, and other factors specific to the site.

Since it is possible to have multiple ArcIMS Spatial Servers on multiple machines, a mechanism is needed to manage these spatial servers and the services running on them. ArcIMS uses a Virtual Server concept to manage services on multiple ArcIMS Spatial Servers. See the ArcIMS technical paper, *ArcIMS 4 Architecture and Functionality,* located at http://support.esri.com and the *Using ArcIMS* book for more information on managing spatial servers and virtual servers.

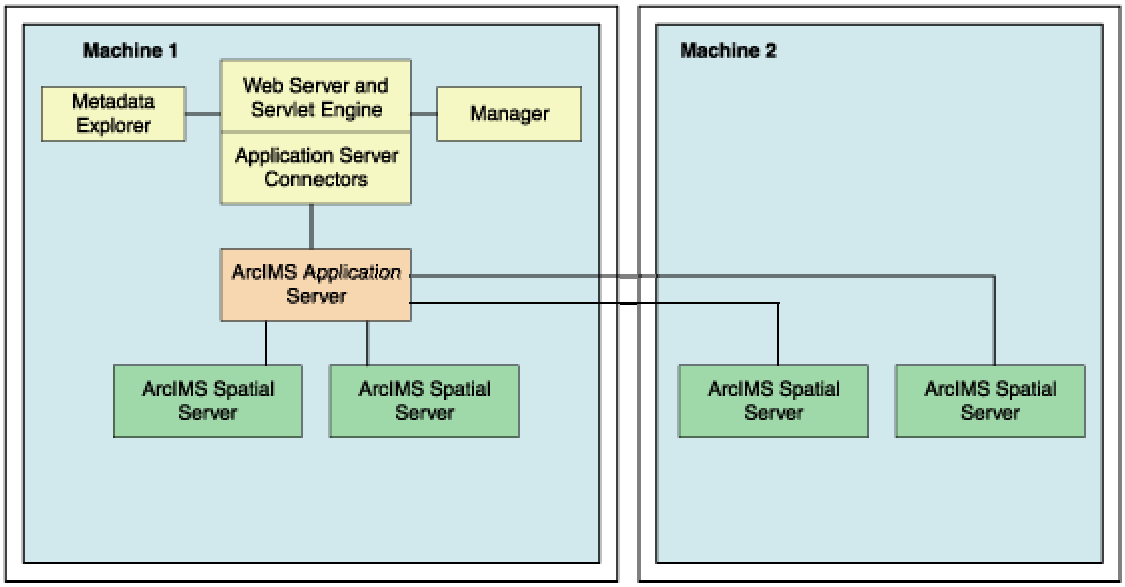
Spatial servers can be distributed across an ArcIMS site in several ways as illustrated below.

- This configuration illustrates two ArcIMS Spatial Servers on the same machine.



To have more than one ArcIMS Spatial Server on the same machine, see the Managing ArcIMS Spatial Servers section in the *Using ArcIMS* book.

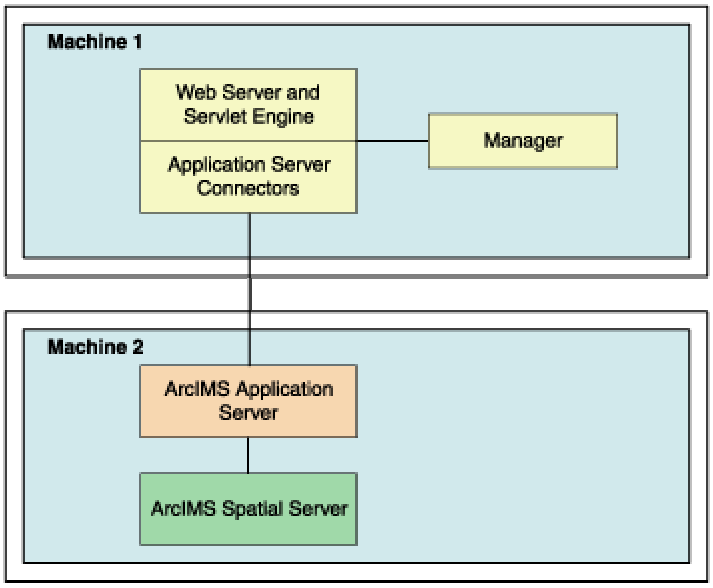
- This configuration illustrates two ArcIMS Spatial Servers on multiple machines.



To install multiple ArcIMS Spatial Servers on additional machines, see the topic Installing multiple ArcIMS Spatial Servers on additional computers.

Dedicated Web server machine

Your site may require your Web server to be on one machine while the ArcIMS components reside on a different machine. In this configuration, the Application Server Connectors must reside on the same machine as the Web server.



If your Application Server is on a different machine from your Application Server Connector, some additional configuration of the Application Server Connector is required. If you are using the Servlet Connector, the Web server-servlet engine configuration available in the post installation will automatically edit your esrimap_prop file with the Application Server name you provide. If you are using the ColdFusion Connector, see the CustomizingColdFusion.pdf for details on the servername attribute value for any action. For Java Connector see the CustomizingJavaConnector.pdf for information on the ConnectionProxy object or the tcpConnection.tag. To install the Customizing documentation, select a Custom ArcIMS installation, expand the Documentation feature, and select all documents to install.

If you will be using Manager, Service Administrator, and/or Metadata Explorer, it is also recommended that Manager, and/or Metadata Explorer be installed on the Web server machine. If you will be using Metadata Explorer and/or Service Administrator, J2SE JDK 1.3.1 or higher is required on this machine. See the topic Verify your system requirements for system requirement information.

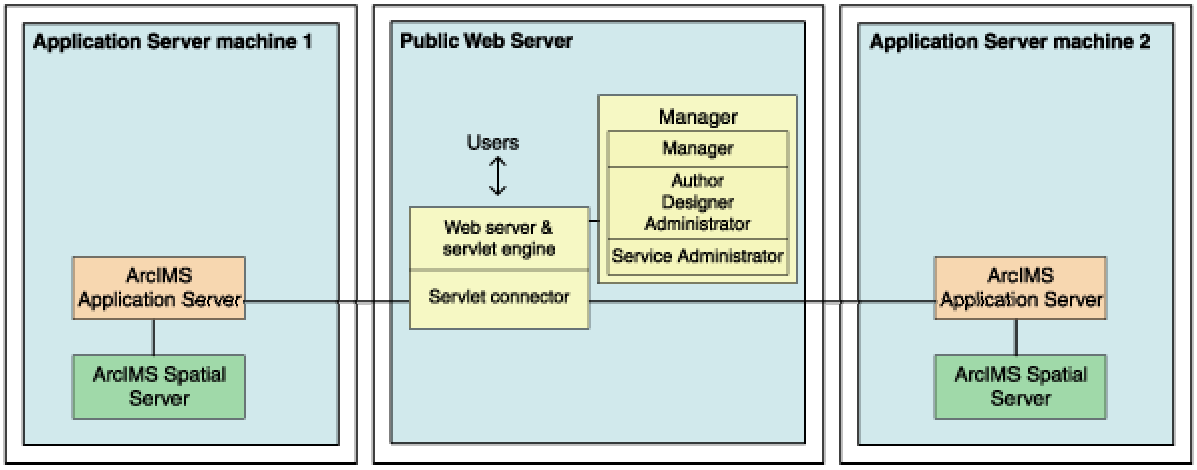
Multiple ArcIMS Application Servers

The ArcIMS Application Server runs as a background process (Windows service/UNIX daemon) and handles the load distribution of incoming requests. The Application Server also catalogs which services are running on which ArcIMS Spatial Servers. Using this information, the Application Server dispatches an incoming request to the appropriate Spatial Server.

Installing multiple ArcIMS Application Servers on different machines can improve load distribution of incoming requests and help create redundancy (failover). Installing the ArcIMS Application Server on a different machine to other ArcIMS components is common in a secure network environment where the Web server is located in the DMZ. The DMZ is established by an outside firewall. See the technical articles for ArcIMS located at http://support.esri.com for more information on system design strategies.

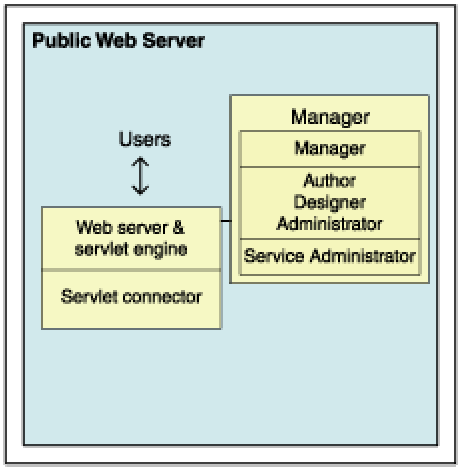
For high-volume implementations of ArcIMS, it is possible to have a single Web server communicate with several application servers in round-robin or failover configuration. If used for round-robin, the Application Server will rotate requests among the specified application servers. If used for failover, the backup Application Server will serve maps when the primary Application Server machine is inaccessible. To support multiple application servers, the Application Server names and ports must be added to the esrimap_prop file, located in your Web server's servlet directory. If more than one Application Server is specified in the esrimap_prop file, you cannot administer multiple application servers with Administrator. To administer multiple application servers, you can use the Service Administrator (installed with the Manager installation feature).

Below is an example of a multiple Application Server set up:



Steps to set up this scenario:

1. Set up a public Web server machine.



This machine will serve the Web sites to users.

1. Verify you meet system requirements, including that your Web server and servlet engine are running and communicating. For information on setting up your Web server and servlet engine visit http://support.esri.com/search/KbDocument.asp?dbid=23450.

   IMPORTANT: You will be using Service Administrator to administer the application servers. Service Administrator will be installed on this machine by the Manager feature. J2SE SDK is required to use Service Administrator. J2SE SDK 1.3.1._02 or 1.4.0 are supported for use with ArcIMS 4.0.1. The document linked above includes instructions on installing J2SE SDK for your Web server and servlet engine configuration.

   To verify that your Web server and servlet engine are communicating, see the topic Verifying your servlet engine.

2. Run the ArcIMS setup. Choose to install the following (uncheck all other ArcIMS installation features so that these features will not be installed):

   - Expand the Application Server Connectors feature, select to install the Servlet Connector only.
   - Select to install Manager.

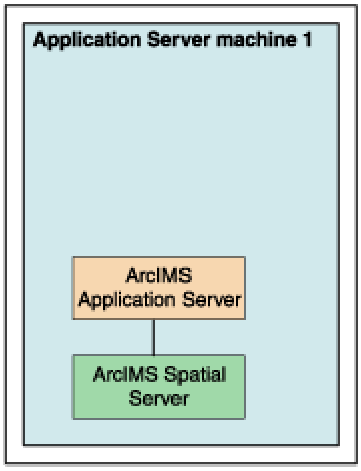
3. Follow the installation directions on the screen.

4. During the post installation setup you will be required to provide the following information:

- The location of your Website and Output directories. In this scenario the Website and Output directories will be created on this machine, as this machine will be used to serve the Web sites. Choose the default directory, or change the location and create these directories on a different local drive.
- Select to share your Output and Website directories by checking the box on the create Web site and Output dialog box. Your Application Server machine will need to be able to access these directories (discussed in detail when setting up Application Server machines).
- The location of your AXL directory. In this scenario the AXL directories will be created on this machine, as this machine will be used to serve the Web sites. Choose the default directory, or change the location and create these directories on a different local drive.
- The name of your Web server. Enter this machine's Web server host name. By default the host name of this machine will be provided.
- The Application Server name and ports. In this scenario you will have two application servers. For now enter the machine name where one of these application servers will be installed. By default the host name of this machine will be provided, change this to the host name of one of your Application Server machines.
- Your Web server and servlet engine information. If you are using a Web server and servlet engine that is automatically configured for you, configuration will be performed by the post installation setup.

5. At the end of the post installation setup, you will be required to stop and restart your Web server to apply configuration changes.
6. Share the directory containing the data you will be using (if it is local data and not ArcSDE data). Each Spatial Server machine must be able to access the data for map services created. The AXL files must be accessible by the Application Server.

2. Create Application Server machine 1

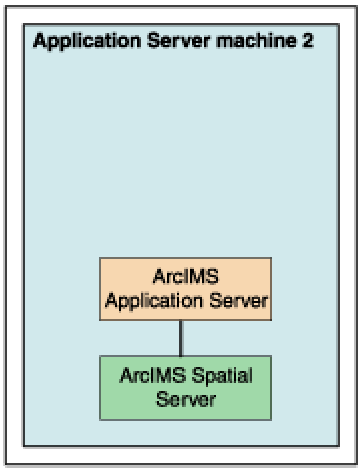


This will be the main Application Server machine. This machine will host the ArcIMS Application Server and the ArcIMS Spatial Server. The Service Administrator will be used to administer this ArcIMS Application Server. We will also create an identical set up on another machine, which will be the backup machine for failover.

1. Verify you meet system requirements.
2. Install the following ArcIMS features (uncheck all other ArcIMS installation features so that these features will not be installed):
   - Application Server
   - Spatial Server only
3. Follow the installation directions on the screen.

4. During the post installation setup you will be required to provide the following information:
   - The location of your Website and Output directories. In this scenario browse to the Website and Output directories located on your public Web server machine (for example, UNC pathname \\publicWebserver\ArcIMS). Your public Web server machine will be used to serve the Web sites.
   - The location of your AXL directory. Browse to your public Web server machine (for example, UNC pathname \\publicWebserver\ArcIMS). Your AXL directory will be created by default under C:\ArcIMS on your public Web server machine. All Application Servers accessing the AXL files will share the files at this location.
   - The name of your Web server. Enter this machine's Web server host name. By default the host name of this machine will be provided.
   - The Application Server name and registry and connector ports. Enter this machine name, where this Application Server has been installed. By default the host name of this machine will be provided.
   - Your system domain, user name, and password to administer ArcIMS background processes. Enter the domain, user name, and password of the ArcIMS installation account. This account must have administrator privileges.
5. Each AXL file references the path to the data used. Verify that the path to the data is accessible by the spatial servers that are registered with the application servers, on Application Server machine 1 and Application Server machine 2. In general, the path to the data must be valid from the perspective of any Spatial Server. It is recommended that the path used be a UNC pathname.

3. Create Application Server machine 2



This machine will be identical to Application Server machine 1. If used for round-robin, it will rotate requests among the two Application Servers. If used for failover, it will serve maps when Application Server machine 1 is inaccessible. This machine, like Application Server machine 1, will host ArcIMS Application Server and ArcIMS Spatial Server. Service Administrator will be used to administer the Application Server.

Follow the same steps above to set up Application Server machine 2, as you did to set up Application Server machine 1.

4. Configure the public Web server machine for multiple application servers

1. Find and open in a text editor the esrimap_prop file located on your public Web server machine in the Web server servlets directory.

   The following lists common default servlet directories for specific Web server and servlet engine combinations:

   Apache with Tomcat: C:\Jakarta-tomcat-3.2.3\Webapps\ROOT\WEB-INF\classes

   Apache with ServletExec: C:\Program Files\New Atlanta\ServletExec AS\se-<instance name>\Servlets

IBM HTTP Server with WebSphere: C:\Websphere\AppServer\installedApps\sampleApp.ear\default_app.war\WEB-INF\classes

Sun ONE 6.0 (iPlanet): C:\iplanet\servers\docs\servlet

Microsoft IIS with JRun: C:\Program Files\Allaire\Jrun\servlets

Microsoft IIS with ServletExec: C:\Program Files\New Atlanta\ServletExec ISAPI\Servlets

Microsoft IIS with Tomcat: C:\Jakarta-tomcat-3.2.3\Webapps\ROOT\WEB-INF\classes

Oracle Application Server: C:\Oracle\iAS\Apache\Jserv\servlets

WebLogic: C:\bea\wlserver6.1\config\<mydomain>\applications\DefaultWebApp\WEB-INF\classes

2. Edit the AppServerMachine parameter in the esrimap_prop file with the names of the Application Servers you installed. (The names of Application Server Machine 1 and Application Server Machine 2, for example, appservermachine1, appservermachine2)

```
### The name of the machine or machines on which the ArcIMS Application Server is running.
### If multiple appServerMachines are specified then multiple appServerClientPort must
### also be specified.
### Example:
### appServerMachine=129.103.35.97,123.151.62.57
appServerMachine=appservermachine1,appservermachine2
```

3. Edit the AppServerClientPort parameter in the esrimap_prop file with the registry port numbers of the Application Servers you installed (for example, 5300, 5300).

```
### The port on which the ArcIMS Servlet Connector communicates with the ArcIMS Application
### Server.  If multiple appServerMachines are specified,
### multiple appServerClientPorts must also be specified.
### Example:
### appServerClientPort=5300,5350
appServerClientPort=5300,5300
```

4. For round-robin, leave the failover parameter in the esrimap_prop file set to false.

```
### Set this to True if you want all requests to be sent to the first
### appServerMachine until it fails to return a response.  Then requests will
### be sent to the second machine in the appServerMachine list.  If failover is
### set to False, the appServerMachines will be used in a round robin manner.
### This property only works with ArcExplorer, Java Viewers, and HTML Viewers.
failover=False
```

5. For failover, set the failover parameter in the esrimap_prop file to true. This will specify that requests should be sent to the first Application Server machine listed, until it fails to return a response, then requests will be sent to the next Application Server listed.

```
### Set this to True if you want all requests to be sent to the first
### appServerMachine until it fails to return a response.  Then requests will
### be sent to the second machine in the appServerMachine list.  If failover is
### set to False, the appServerMachines will be used in a round robin manner.
### This property only works with ArcExplorer, Java Viewers, and HTML Viewers.
failover=False
```

6. After editing the esrimap_prop file, save changes and stop and restart your Web server.

5. Create your map services for both Application Servers.

The Service Administrator will be used to administer the ArcIMS Application Servers. If you met all system requirements, and you used the post installation setup to configure your Web server, the Service Administrator will have been set up. If you manually configured your Web server, you must manually configure your Web server for Service Administrator (see the Configuring for Service Administrator topic for your Web server).

To access Service Administrator open your browser (on any machine), and type: `http://<Web server machine name>/esriadmin`

For example: `http://publicWebserver/esriadmin`

By default the login page for Application Server 1 will be displayed. The Application Server specified in the esriadmin.properties file determines the default log in page displayed. Provide the user name and password to log in to administer Application Server 1.

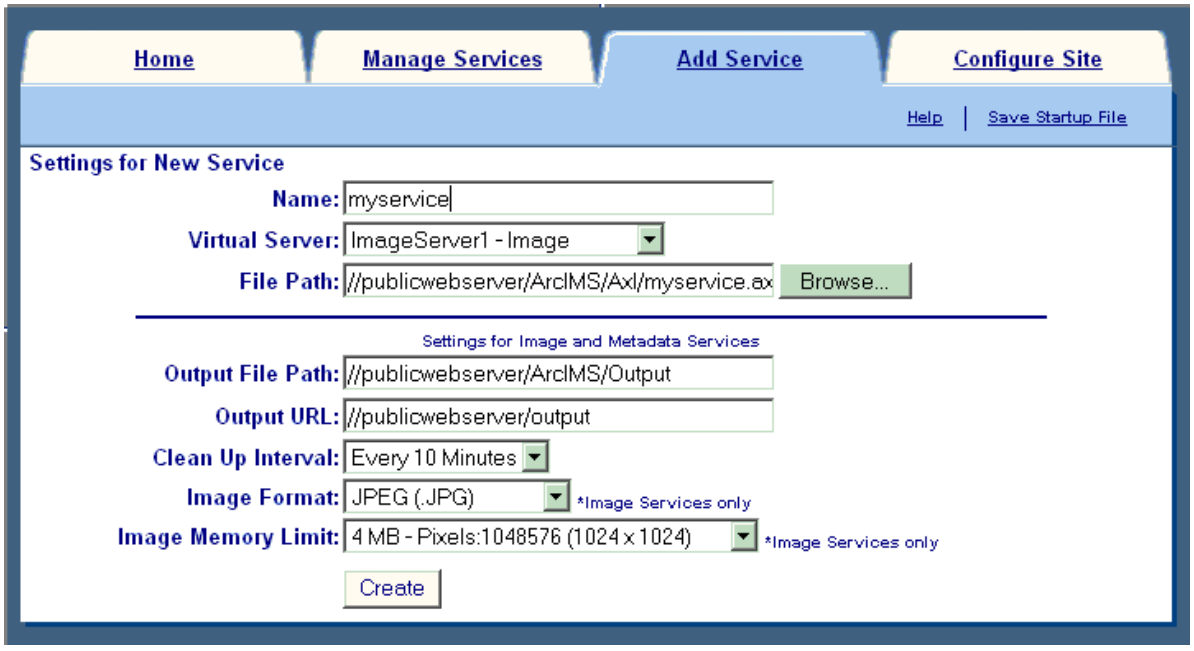
To administer Application Server 2, adapt the URL as follows:

```
http://<Web server machine name>/esriadmin/logincheck.jsp?host=<Application Server Machine 2>&port=<appservermachine2port>
```

For example:
`http://publicWebserver/esriadmin/logincheck.jsp?host=appservermachine2&port=5300`

For more information on using Service Administrator, see the Using ArcIMS Service Administrator section of *Using ArcIMS*.

Services created on each Application Server should be completely identical. The image below illustrates the parameters used in this scenario to create new services on Application Server machine 1 and Application Server machine 2. The public Web server machine serves the Web sites to the users, so the output files should be stored on this machine. The Server output locations were manually changed to point to the public Web server machine. (In this example, "publicWebserver" will be the host name of your public Web server machine.) In this example, the AXL file used is also stored on the public Web server machine, the UNC pathname to the AXL file is provided in the File Path field.



Once you have determined your ArcIMS site configuration, see Step 3a: Installing ArcIMS.

Step 3a: Installing ArcIMS

Overview

The ArcIMS 4.0.1 install consists of two parts, the installation and the post installation.

- The installation is the setup process where you determine what installation features you would like to install. The setup program will install the files required for these features.
- The post installation is the setup process that completes your ArcIMS installation. In the post installation setup, depending on what features were installed, you will be able to configure ArcIMS, configure the ArcSDE Services Monitor, set up the Site Information Converter, configure your Web server-servlet engine, configure your system JRE, and configure ArcMap Server. See the post installation setup section for more information.

To successfully install ArcIMS 4.0.1, both the installation and post installation must be completed.

To install ArcIMS 4.0.1

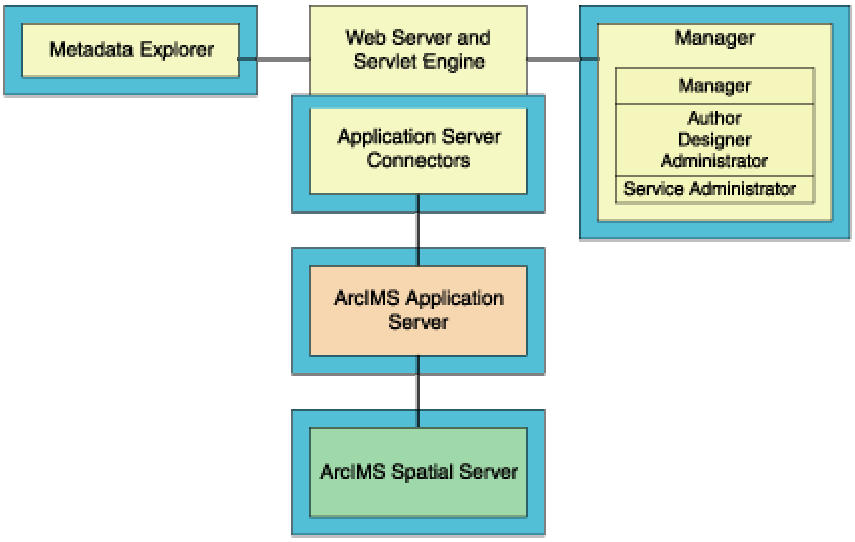
Choose the installation steps for your configuration:

- Performing a typical installation
- Installing ArcIMS ArcMap Server
- Installing ArcIMS custom Application Server Connectors
- Installing ArcIMS Manager Applications
- Installing ArcIMS Service Administrator
- Installing ArcIMS ArcSDE Services Monitor
- Installing ArcIMS Spatial Servers
- Installing Metadata Explorer

Performing a typical installation

In this installation scenario, your Web site uses the resources of one computer; Web server software and ArcIMS are installed on the same computer. This configuration is useful for those with limited resources or light server loads. If you are new to ArcIMS, start with this installation and install the preselected features, referred to as a typical installation. The main ArcIMS features installed with a typical ArcIMS installation are highlighted in the diagram below. **Note:** All Application Server Connectors are not installed; by default a typical installation installs the Servlet Connector. A typical ArcIMS installation assumes that your machine has met system requirements, and a Web server and servlet engine are installed and communicating. For more information on these features see the Overview and ArcIMS site configuration topics. You can access Manager remotely from any computer using your Internet Explorer Web browser; you only need one manager per ArcIMS Web site.

The ArcIMS Host is considered to be the ArcIMS Manager, Application Server Connectors, and ArcIMS Application Server. The ArcIMS Host is typically installed on the Web server machine. A typical ArcIMS installation, as described below, will install the ArcIMS Host and ArcIMS Spatial Server on the same machine as your Web server.



Installing ArcIMS 4.0.1

The ArcIMS typical installation procedure includes the following steps:

1. **Start the setup program**

   Follow these steps:

   1. Verify that your site meets the system requirements. For system requirement information see Step 1: Verify system requirements.
   2. Log in as a user with administrative privileges.
   3. Ensure that a TEMP variable is set to a valid folder where you have write access and space available.
   4. Close all applications on your computer.
   5. Insert the ArcIMS CD into the CD drive to automatically launch the setup program.

   Manually running the setup program

   Microsoft Windows 2000/XP

   From Start > Settings > Control Panel > Add or Remove Programs, click Add New Programs (CD icon) on the left side of the display, then on the CD or Floppy button. Browse for the setup.exe located on the ArcIMS CD.

Microsoft Windows NT

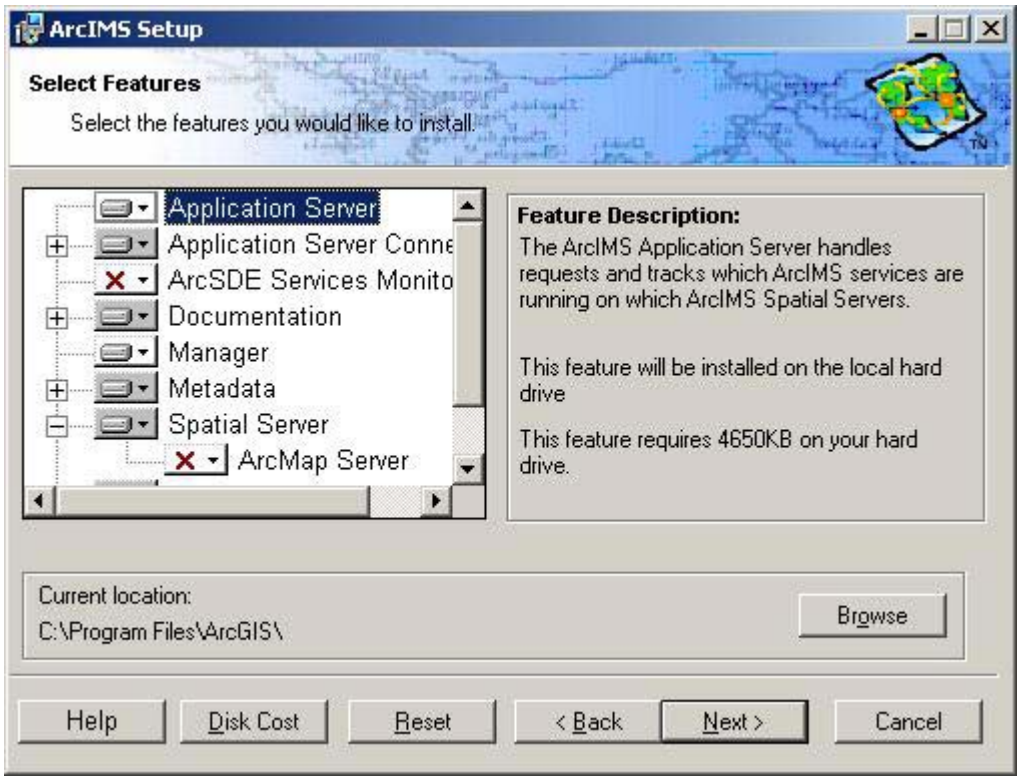
Go to Start > Settings > Control Panel > Add/Remove Programs. On the Install/Uninstall tab click the Install button. Click Next in the Install Program From Floppy Disk or CD–ROM dialog box. Browse for the setup.exe located on the ArcIMS CD.

Note: You may be prompted to install the Microsoft Windows Installer.

Note: If you do not have Internet Explorer 5.0.1 or higher and Microsoft Data Access Components 2.5 or higher, the install will optionally let you install MDAC 2.5. You must obtain and install Internet Explorer 5.0.1 or higher. Internet Explorer 5.0.1 or higher and MDAC 2.5 is required for ArcIMS ArcMap Server. Internet Explorer 5.0.1 or higher is also required for the ActiveX connector.

During the installation you will be asked to read the license agreement and accept it, or exit if you don't agree with the terms.

The ArcIMS install allows you to select the features you would like to install.



By default the features of a typical ArcIMS installation are selected to be installed. A typical installation includes the features most commonly installed on one machine. The main features installed with a typical ArcIMS installation are highlighted in the diagram above. (**Note:** All Application Server connectors are not installed; by default a typical installation installs the Servlet Connector.) For more information on these features see the Overview and ArcIMS site configuration topics.

The ArcIMS installation consists of a collection of features and subfeatures. An example of a feature is Spatial Server, which consists of a subfeature, ArcMap Server. Many ArcIMS installation features contain subfeatures. Features consisting of subfeatures will have a + or a - sign to their left. The + sign will expand the feature so that you can view its subfeatures. The - sign will collapse the list of subfeatures. To install other features see the Overview in Step 3a: Installing ArcIMS. To install features at a later time, see Adding additional installation components.

To complete the installation, follow the directions on the screen.

Note: Microsoft's Java Virtual Machine (VM) 3186 or later is required for the ArcIMS Monitor Windows Service, the ArcIMS Application Server Service, and the ArcIMS Tasker Service. The ArcIMS Monitor Service is installed with ArcIMS Spatial Server, ArcMap Server, and ArcSDE Services Monitor. The Application Server and Tasker Services are installed with the ArcIMS Application Server. The installation updates your system if Java Virtual Machine is not detected or if you have an earlier version.

2. **Complete the post installation setup**

   After completing the ArcIMS installation, you will be provided with the opportunity to begin the post installation setup. The following ArcIMS post installation options are required to successfully complete a typical ArcIMS installation:

   - ArcIMS Configuration
   - Web Server-Servlet Engine Configuration

   Configure System J2SE JRE (if a system J2SE JRE version 1.3.1 or higher is not detected on your system).

   If you select a typical post installation setup, these post installation options are automatically selected. See the post installation topic for information on the post installation setup.

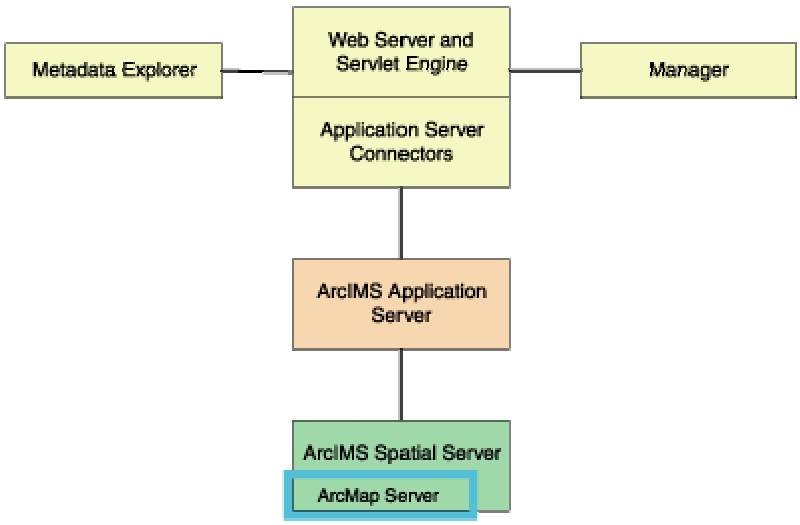
   Before you begin ArcIMS, if you did not choose to automatically configure your Web server-Servlet Engine in the post installation, you must complete Step 4: Configure your Web Server, either manually or by running the post installation setup again.

   NOTE: The setup stores the necessary configuration information to use the applications in the \profiles\username location of the user that installed ArcIMS. If you need alternate login accounts to use ArcIMS applications, copy the aimsdefault.properties file from the profiles\username folder of the account that installed ArcIMS to the \profiles\username folder of the alternate users. It is important to copy the file (which will have been updated during the initial installation) that resides in the installer's profile folder. The aimsdefault.properties file, located in the ArcIMS\Common installation location, contains default values and will not work.

Installing ArcIMS ArcMap Server

ArcIMS ArcMap Server, installed as a subfeature of ArcIMS Spatial Server, allows users to create maps in ArcMap and serve them over the Internet via an ArcIMS Web site. Services created with ArcMap Server, called ArcMap Image Services, can be viewed using the same client viewers as ArcIMS Image and Feature Services. ArcMap Server is available on Windows only. ArcMap Server requires an ArcGIS License Manager.

Note: ArcIMS ArcMap Server cannot reside on the same computer as ArcGIS.



Note: These instructions describe an ArcMap Server installation only. To install the ArcIMS Host (ArcIMS Manager, Application Server Connectors, and ArcIMS Application Server), refer to Peforming a typical installation.

If installing ArcMap Server as part of a distributed system, you will need to also set up your ArcIMS Host Machine. See Installing multiple Spatial Servers (Installing and Configuring your ArcIMS Host Machine and Additional Configuration of the ArcIMS Host Machine), for information on setting up your ArcIMS Host Machine.

ArcGIS License Manager

The ArcMap Server component requires an ArcGIS license manager. An ArcMap Server keycode is used to "turn on" the ArcMap Server functionality; the license manager controls this. You request the right to use the ArcMap Server on your licensed server/CPU configuration. The post installation setup will allow you to install the license manager locally or use an existing license manager on the network. (See ArcMap Server Configuration in the post installation setup section.) A network license manager can be running on Microsoft Windows or UNIX. If you choose a license manager on your network, it must contain an ArcMap Server feature (keycode). For more information see About the license manager and Obtaining a license file. Refer to the License Manager Reference Guide, LicenseManagerGuide.htm, in the documentation folder of the ArcIMS CD.

Installing ArcIMS ArcMap Server

The ArcMap Server installation procedure includes the following steps:

1. **Determine the location of the license manager**

   Each Windows license manager requires a Sentinel hardware key. If you only have one hardware key, you will install the license manager on one machine on your network and all installations will use that license manager for ArcIMS ArcMap Server. If a license manager is already installed on your network, you can use it to administer ArcMap Server. ArcMap Server licenses can be served from either a Windows or a UNIX license manager. For more information on sharing licenses across platforms, see the License Manager Reference Guide, LicenseManagerGuide.htm, located in the Documentation folder on the ArcIMS CD.

If a license manager exists on your network for ArcIMS ArcMap Server, you can specify a network license manager in the ArcMap Server post installation.

2. Start the setup program

Follow these steps:

1. Verify that your site meets the system requirements. For system requirement information see Step 1: Verify system requirements.
2. Log in as a user with administrator privileges.
3. Ensure that a TEMP variable is set to a valid folder where you have write access and space available.
4. Close all applications on your computer.
5. Insert the ArcIMS CD into the CD drive to automatically launch the setup program.

Manually running the setup program

Microsoft Windows 2000/XP

From Start > Settings > Control Panel > Add or Remove Programs, click Add New Programs (CD icon) on the left side of the display, then click the CD or Floppy button. Browse for the setup.exe located on the ArcIMS CD.

Microsoft Windows NT

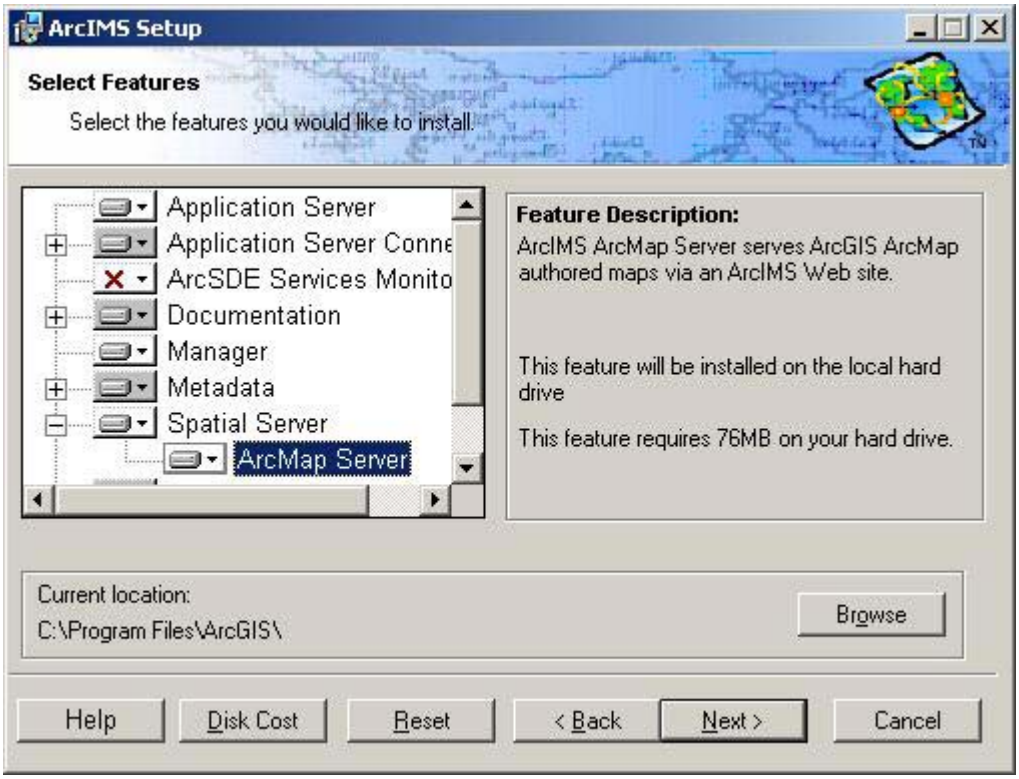
Go to Start > Settings > Control Panel > Add/Remove Programs. On the Install/Uninstall tab click the Install button. Click Next in the Install Program From Floppy Disk or CD–ROM dialog box. Browse for the setup.exe located on the ArcIMS CD.

Note: You may be prompted to install the Microsoft Windows Installer.

Note: If you do not have Internet Explorer 5.0.1 or higher and Microsoft Data Access Components 2.5 or higher, the install will optionally let you install MDAC 2.5. You must obtain and install Internet Explorer 5.0.1 or higher. Internet Explorer 5.0.1 or higher and MDAC 2.5 are required for ArcIMS ArcMap Server. Internet Explorer 5.0.1 or higher is also required for the ActiveX connector.

During the installation you will be asked to read the license agreement and accept it, or exit if you don't agree with the terms.

At the Select Features dialog box, expand the Spatial Server feature by clicking on the + sign to view the subfeatures. Spatial Server contains the ArcMap Server subfeature. Click the drop-down arrow to the left of the ArcMap Server subfeature. From the list, select Will be installed on local hard drive to install ArcMap Server.



An ArcMap Server sample is also available for installation. Expand the Samples feature and select ArcMap Server Sample. Click the drop-down arrow to the left of the ArcMap Server Sample subfeature. From the list, select Will be installed on local hard drive to install the ArcMap Server sample.

To complete the installation, follow the directions on your screen.

ArcMap Server is installed under <ArcIMS Installation Directory>\ArcIMS\Server.

Note: Microsoft's Java Virtual Machine 3186 or later is required for the ArcIMS Monitor Windows Service. The ArcIMS Monitor Service is installed with ArcMap Server. The installation updates your system if Java Virtual Machine is not detected or if you have an earlier version.

3. Complete the post installation setup

The following ArcIMS post installation options are required to successfully install

- ArcIMS ArcMap Server
- ArcIMS Configuration
- ArcMap Server Configuration

If you select a typical post installation setup, these post installation options are automatically selected. See the post installation topic for information on the post installation setup options.

The license manager installation is available in the ArcMap Server post installation setup option, or you can browse to the location of a license manager on the network. If you have an existing network license manager for ESRI products, you will need to update it to the latest license manager.

Note: You must have installed ArcMap Server in order to select the ArcMap Server configuration in the post installation setup.

NOTE: The setup stores the necessary configuration information to use the applications in the \profiles\username location of the user that installed ArcIMS (for Windows 2000 or Windows XP, C:\Documents and Settings\username; for

Windows NT, C:\WINNT\Profiles\username). If you need alternate login accounts to use ArcIMS applications, copy the aimsdefault.properties file from the profiles\username folder of the account that installed ArcIMS to the \profiles\username folder of the alternate users. It is important to copy the file (which will have been updated during the initial installation) that resides in the installer's profile folder. The aimsdefault.properties file located in the ArcIMS\Common installation location contains default values and will not work.

4. **Additional configuration steps for ArcIMS ArcMap Server**

- If you installed ArcMap Server, and ImageServerArcMap1 is not available in the Virtual Server list of Administrator, you must manually create the ArcMap Virtual Server. See *Using ArcIMS* for information on creating the ArcMap Virtual Server.
- The following steps are required only when ArcMap Server and ArcGIS ArcReader™ are installed on the same machine. If ArcReader is installed on a computer that runs ArcMap Server or if ArcMap Server is installed on a computer that already has ArcReader, you will need to configure your computer according to the steps given below:

Windows NT and Windows 2000

1. On Windows NT, click Start > Settings > Control Panel > Services; on Windows 2000, click Start > Settings > Control Panel > Administrative Tools > Component Services and click Services on the Tree tab
2. Stop ArcIMS Tasker, ArcIMS Monitor, and ArcIMS Application Server in that order.
3. Open Task Manager and confirm that AppLockMgr does not appear in the list. If it does, end the process.
4. Click Start > Run and type: dcomcnfg.exe
5. Locate the AppLockMgr application in the list of Distributed Component Object Model (DCOM)- enabled applications. It will be listed as esriCore.esriAppLockMgr. Right-click it and click Properties.
6. Click the Identity tab.
7. Select the This User option.
8. Type the user and password.
9. Click OK and close the DCOM configuration dialog box.
10. Start ArcIMS Application Server, ArcIMS Monitor, and ArcIMS Tasker in that order and close the Services window.

Windows XP

1. On Windows XP, click Start > Control Panel > Performance and Maintenance > Administrative Tools > Component Services and click Services on the Tree tab.
2. Stop ArcIMS Tasker, ArcIMS Monitor, and ArcIMS Application Server in that order.
3. Open Task Manager and confirm that AppLockMgr does not appear in the list. If it does, end the process.
4. Click Start > Run and type: `dcomcnfg.exe`. This will start the Component Services console.
5. Select the appropriate computer in the component services node on the left.
6. Expand the DCOM Configuration node.
7. Locate the AppLockMgr application in the list of DCOM-enabled applications. It will be listed as esriCore.esriAppLockMgr. Right-click it and click Properties.
8. Click the Identity tab.
9. Select the This User option.
10. Type the user and password.
11. Click OK and close the DCOM configuration dialog.

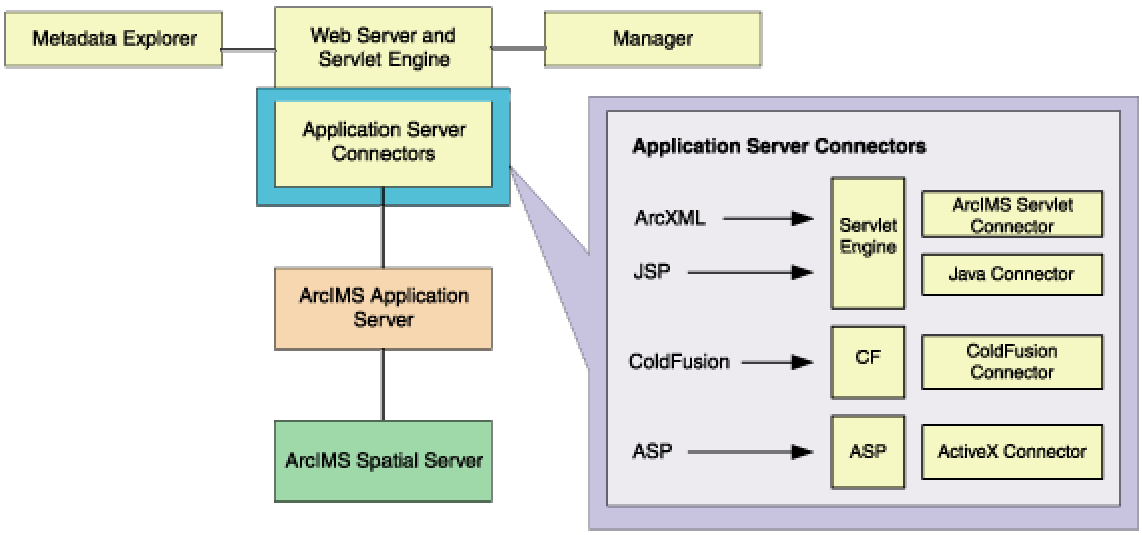
12. Start ArcIMS Application Server, ArcIMS Monitor, and ArcIMS Tasker in that order and close the Services window.

For information on using ArcMap Server, see *Using ArcIMS* or ArcIMS Help.

Installing ArcIMS custom Application Server Connectors

In this installation scenario, you select an ArcIMS Application Server Connector depending on the development environment you plan to use for creating Web pages. The available Application Server Connectors are ArcIMS Servlet Connector, ActiveX Connector, ColdFusion Connector, and Java Connector.

The Application Server Connectors reside on the Web server computer. Each Web server can have more than one Application Server Connector, as long as they are of different types.



The Servlet Connector is the standard ArcIMS Connector. The typical installation installs this connector. You need this connector if you plan to administer Web pages or use the Web design tools in ArcIMS (Author and Designer). The Servlet Connector also provides MapService-level user password authentication. WMS is installed with the Servlet Connector but not automatically configured during the installation. In order to enable ArcIMS to work within the OGC WMS 1.0.0 specification, see the Configuring WMS section.

Use the ColdFusion Connector if you plan to embed ColdFusion applications in your Web pages. The Java Connector communicates with the ArcIMS Application Server and a JSP client. The ActiveX Connector permits you to customize the ArcIMS Viewers with embedded ActiveX applications.

See Step 1: Verify System Requirements for requirements for the ColdFusion and ActiveX Connectors.

Note: These instructions describe an ArcIMS Application Server and custom connector installation only. To install the ArcIMS Host (ArcIMS Manager, Application Server Connectors, and ArcIMS Application Server), refer to Performing a typical installation.

To install ArcIMS Application Server Connectors

The ArcIMS Application Server Connectors installation procedure includes the following steps:

1. **Start the setup program**

   Follow these steps:

   1. Verify that your site meets the system requirements. For system requirement information see Step 1: Verify system requirements.
   2. Log in as a user with administrator privileges.
   3. Ensure that a TEMP variable is set to a valid folder where you have write access and space available.

4. Close all applications on your computer.
5. Insert the ArcIMS CD into the CD-ROM drive to automatically launch the setup program.

Manually running the setup program

Microsoft Windows 2000/XP

From Start > Settings > Control Panel > Add or Remove Programs, click on Add New Programs (CD icon) on the left side of the display, then on the CD or Floppy button. Browse for the setup.exe located on the ArcIMS CD.

Microsoft Windows NT

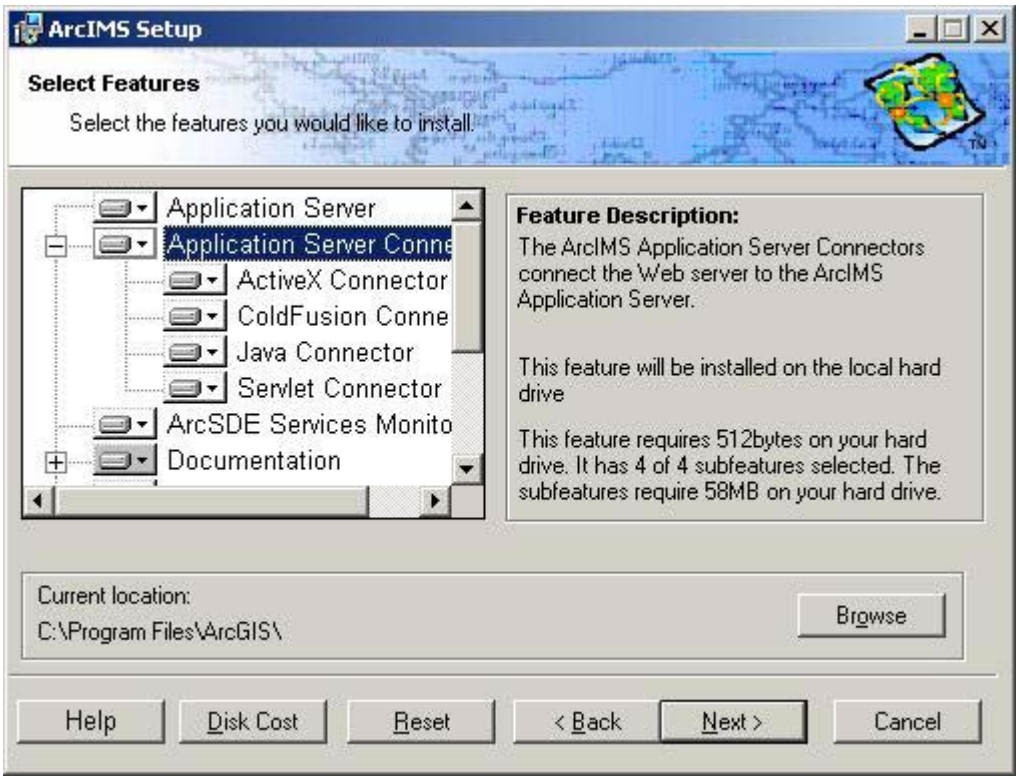
Go to Start > Settings > Control Panel > Add/Remove Programs. On the Install/Uninstall tab click the Install button. Click Next in the Install Program From Floppy Disk or CD–ROM dialog box. Browse for the setup.exe located on the ArcIMS CD.

Note: You may be prompted to install the Microsoft Windows Installer.

Note: If you do not have Internet Explorer 5.0.1 or higher and Microsoft Data Access Components 2.5 or higher, the install will optionally let you install MDAC 2.5. You must obtain and install Internet Explorer 5.0.1 or higher. Internet Explorer 5.0.1 or higher and MDAC 2.5 are required for ArcIMS ArcMap Server. Internet Explorer 5.0.1 or higher is also required for the ActiveX connector.

During the installation you will be asked to read the license agreement and accept it, or exit if you don't agree with the terms.

At the Select Features dialog box, expand the Application Server Connectors feature by clicking on the + sign to view the subfeatures. The Application Server Connector feature contains the ActiveX Connector, ColdFusion Connector, Java Connector, and Servlet Connector subfeatures. Click the drop-down arrow to the left of the Application Server Connector that you would like to install. From the list, select Will be installed on local hard drive to install the selected Application Server Connector.



There are also Application Server Connector Documentation and Samples available to install. Expand the Documentation and Samples features by clicking on the + sign to view the subfeatures. Select the Documentation and Samples subfeatures you

would like to install, click on the drop-down arrow to the left of each feature. From the list, select Will be installed on local hard drive to install the selected Documentation and Samples subfeatures.

To complete the installation, follow the directions on your screen.

Note: The ArcIMS Servlet Connector is already installed if you previously performed a typical ArcIMS installation.

The ArcIMS ColdFusion extension libraries are installed at <ColdFusion Server Installation Directory>\bin. The ArcIMS ColdFusion MX extension DLLs are installed at <ColdFusion Server Installation Directory>\runtime\bin.

The ArcIMS custom tag files are installed at <ColdFusion Server Installation Directory>\CustomTags.

The ArcIMS ColdFusion Studio Custom Toolbar files are installed in the following locations:

VTML files are installed at <ColdFusion Studio Installation Directory>\Extensions\TagDefs\VTML

Image files are installed at <ColdFusion Studio Installation Directory>\Wizards\Images

Toolbar file is installed at <ColdFusion Studio Installation Directory>\UserData\Toolbars

The ArcIMS ActiveX libraries are installed at <ArcIMS Installation Directory>\ArcIMS\Connectors\ActiveX.

The Java Archive (JAR) files required to use the Java Connector are installed at <ArcIMS Installation Directory>\ArcIMS\Connectors\Java_Connector. They are arcims_jconnect.jar, jcert.jar, jnet.jar, and jsse.jar.

2. **Complete the post installation setup**

   The following ArcIMS post installation options are required to successfully install custom Application Server Connectors:

   - ArcIMS Configuration (includes ColdFusion Connector configuration if the ColdFusion Connector was installed)
   - Web Server-Servlet Engine Configuration

   If you select a typical post installation setup, these post installation options are automatically selected. See the post installation topic for information on the post installation setup options.

3. **Additional configuration steps for custom Application Server Connectors**

   Before the installation is complete, configure the connector you installed:

   - ArcIMS ActiveX Connector
   - ArcIMS ColdFusion Connector
   - ArcIMS Java Connector
   - ArcIMS Servlet Connector
   - WMS

   NOTE: The setup stores the necessary configuration information to use the applications in the \profiles\username location of the user that installed ArcIMS (for Windows 2000 or Windows XP, C:\Documents and Settings\username; for Windows NT, C:\WINNT\Profiles\username). If you need alternate login accounts to use ArcIMS applications, copy the aimsdefault.properties file from the profiles\username folder of the account that installed ArcIMS to the \profiles\username folder of the alternate users. It is important to copy the file (which will have been updated during the initial installation) that resides in the installer's profile folder. The aimsdefault.properties file located in the ArcIMS\Common installation location contains default values and will not work.

   Note: To install the Z39.50 Connector see Installing Metadata Explorer.

ArcIMS ActiveX Connector

For ActiveX information, see *Customizing ArcIMS—ActiveX Connector.*

ArcIMS ColdFusion Connector

After installing the ArcIMS ColdFusion Connector, you must configure ColdFusion Server to work with ArcIMS. To use ArcIMS with ColdFusion, you need ColdFusion Server Professional or Enterprise, and you need ColdFusion Studio to create custom Web pages.

The ArcIMS ColdFusion 5.0 or earlier extension DLLs are installed at <ColdFusion Server Installation Directory>\bin. The ArcIMS ColdFusion MX extension DLLs are installed at <ColdFusion Server Installation Directory>\runtime\bin.

These files are aimsutil.dll, cfx_esrimap.dll, emaplink.dll, xerces-c_1_3.dll, icuuc.dll, icui18n.dll, and icudata.dll.

The ArcIMS custom element files are installed at <ColdFusion Server Installation Directory>\CustomTags.

These files are ai_QueryForm.cfm, ArcIMS.cfm, ArcIMS_FilterSQL.cfm, ArcIMS_Layer.cfm, ArcIMS_MultiPoint.cfm, ArcIMS_Polygon.cfm, ArcIMS_Polygon_Query.cfm, ArcIMS_PolyLine.cfm, ArcIMS_SQL.cfm, and ArcIMS_Text.cfm.

If the custom element files listed above are not in the location indicated, you can copy them from the ArcIMS ColdFusion Connector directory located at <ArcIMS Installation Directory>\ArcIMS\Connectors\ColdFusion under the CustomTags directory. Also copy the server bin files.

Setting up the ColdFusion Server to recognize the ArcIMS ColdFusion Connector

1. Open the ColdFusion Server administrator page. On the navigation bar, find extensions and click CFX_Tags.
2. Click OK on Register C++ CFX.
3. Type the following as the Tag Name:

   ```
   CFX_esrimap
   ```

4. For the Server library (DLL), click Browse Server to navigate to:
   - For ColdFusion 5.0 or earlier <ColdFusion Server Directory>\bin\cfx_esrimap.dll
   - For ColdFusion MX <ColdFusion Server Directory>\runtime\bin\cfx_esrimap.dll
5. Click Submit Changes.
6. Close the ColdFusion Server administrator page.

Setting up the design time control in ColdFusion Studio

The design time control is a wizard that allows users to supply the parameters required for the elements, then generates the element code in the page. To add the control to the ColdFusion Studio toolbar:

1. If you had ColdFusion Studio installed prior to ArcIMS installation, CF_ARCIMS.vtm, CF_Arcims_layer.vtm, Point.vtm, and Text.vtm are at:

   <ColdFusion Studio Directory>\Extensions\TagDefs\VTML.

   The images used by the ArcIMS Custom Toolbar: aimslayer.bmp, aimsline.bmp, aimslogo.bmp, aimspnt.bmp, aimspoly.bmp, and aimssql.bmp are at:

   <ColdFusion Studio Install directory>\Wizards\Images.

   The ArcIMS Custom toolbar, ArcIMS.tbr, is at:

   <ColdFusion Studio Install directory>\UserData\Toolbars.

   If you did not have ColdFusion Studio installed prior to installing ArcIMS, then copy the files from the following locations to the locations indicated above:

   VTML files: <ArcIMS Installation Directory>\Connectors\ ColdFusion\Studio

   Image files: <ArcIMS Installation Directory>\Connectors\ ColdFusion\images

Toolbar files: <ArcIMS Installation Directory>\Connectors\ ColdFusion\userdata\toolbars

2. Open ColdFusion Studio to edit Tag Insight and Tag Completion.
   a. Click the Options menu and click Settings. Click Tag Insight.
   b. Click Add, and type the following: cf_arcims

      Click OK.
   c. Select Tag Completion.
   d. Click Add, and type the following: cf_arcims

      Click OK. Click Apply to close the Settings window.
3. To create the ArcIMS toolbar, click the Options menu and click Customize. In the Visible Toolbars list, check ArcIMS. Click Close.
4. Dock the ArcIMS tool to the ColdFusion tag toolbar.
5. Open <ColdFusion Studio Directory>\Extensions\ MarkUpTags.vtm in a text editor. After the line <CAT CAPTION='Custom Tags,' add the following:

```
<CAT CAPTION="ESRI Custom Tags"  ICON="Images/Custom.bmp">
<E CAPTION='CF_ARCIMS'  VALUE='<CF_ARCIMS action="" servicename="" servername=""
serverport=""' HELPFILE='Docs/CFMLTags/ArcIMSColdFusion.htm'>
</CAT>
```

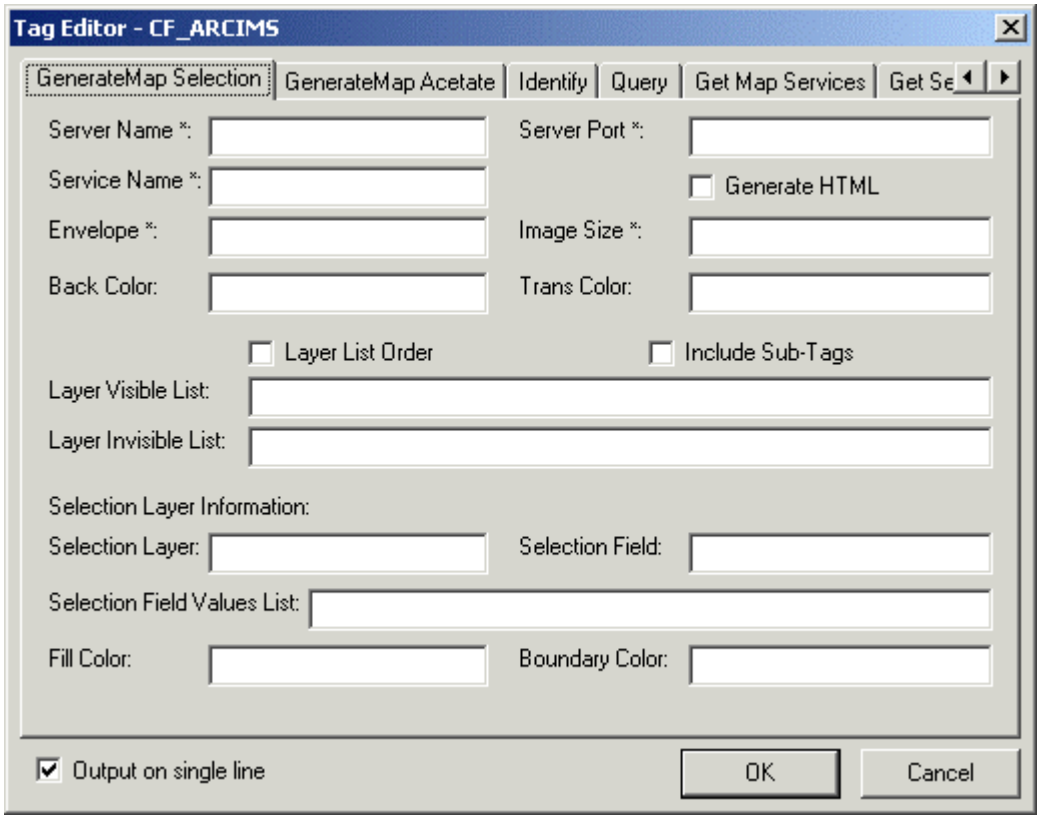
6. Save the file and close the text editor.

Testing the design time control in ColdFusion Studio

The toolbar contains six buttons for working with the new ArcIMS elements: <CF_ARCIMS>, <CF_ARCIMS_LAYER>, <CF_ARCIMS_SQL>, <CF_ARCIMS_MULTIPOINT>, <CF_ARCIMS_POLYLINE>, and <CF_ARCIMS_POLYGON>.

Click the <CF_ARCIMS> button. A dialog box opens presenting all the element attributes.

Set the tag parameters. Click Apply to see the tag code created in the page.



The tabs across the top represent the different values of the ACTION attribute of the <CF_ARCIMS> element. For example, the element code for the Generatemap action might look like this.

```
<CF_ARCIMS ACTION="GENERATEMAP"
SERVERNAME="bear"
SERVERPORT="5300"
SERVICENAME="SanFrancisco"
ENVELOPE="-122.46,37.76,-122.42,37.79"
IMAGESIZE="400,400"
LAYERLISTORDER="true"
GENERATEHTML="true">
</CF_ARCIMS>
```

Close ColdFusion Studio.

For information on using the ColdFusion Connector, see *Customizing ArcIMS—ColdFusion Connector.*

ArcIMS Java Connector

For information on using the Java Connector, see *Customizing ArcIMS—Java Connector.*

ArcIMS Servlet Connector

If you installed the ArcIMS Servlet Connector, you must configure your Web server and servlet engine before you begin using ArcIMS software. Your Web server and servlet engine can be configured automatically using the post installation setup, or they can be configured manually.

To automatically configure your Web server and servlet engine, use the post installation setup. See the Web Server-Servlet Engine Configuration option for information on the following automated Web Server-Servlet Engine configurations:

- Tomcat for Apache

- ServletExec 4.1.1 for Apache
- Sun ONE 6.0 (iPlanet) Web Server (with its native Java servlet engine)
- Tomcat for IIS
- ServletExec 4.1.1 for IIS

To manually configure your Web server and servlet engine for ArcIMS use the steps provided in Step 4: Configure your Web server.

For information on the ArcIMS Servlet Connector, see ArcIMS Help.

WMS

To configure ArcIMS with WMS, perform the following:

1. In a text editor, open the WMSEsrimap_prop file in the location of your Servlets directory where the Servlet Connector is installed (see the ArcIMS Configuration post installation option 3. Enter the Web server servlet connector directory).

   For example

   Apache with ServletExec: \Program Files\New Atlanta\ServletExec AS\se-<instance-name>\Servlets

   Apache with Tomcat: \<Tomcat Installation Directory>\Webapps\ROOT\WEB-INF\classes

   IBM HTTP Server with WebSphere:
   \WebSphere\AppServer\installedApps\servlet.ear\arcimsservletconnector.war\WEB-INF\classes

   iPlanet: \iPlanet\Servers\docs\servlet

   Microsoft IIS with JRun: \Program Files\Allaire\Jrun\servlets

   Microsoft IIS with ServletExec: \Program Files\New Atlanta\ServletExec ISAPI\Servlets

   Microsoft IIS with Tomcat: \<Tomcat Installation Directory>\Webapps\ROOT\WEB-INF\classes

   Oracle Application Server: \Oracle\isuites\Apache\Jserv\servlets

   WebLogic: \bea\wlserver6.1\config\mydomain\applications\DefaultWebApp\WEB-INF\classes

   Note: If the file is not there, see Step 4: Configure your Web server.
2. Find `enable` and change it to `enable=true.`
3. Find `appServerMachine` and set it to the name of the computer where the ArcIMS Application Server is installed.
4. Find `appServerClientPort` and set it to the name of the port on which the Application Server is running (default is 5300).
5. Find `capabilitiesDir` and provide the path to the capabilities directory, for example, capabilitiesDir=c:/ArcIMS/capabilities.
6. Find `debug` and set it to `debug=true` if you want detailed debug information. If you set it to true, the log file will be created inside the working directory.
7. Find `workingDirectory` and provide the path to the working directory, for example, `workingDirectory=c:/ArcIMS/workingdir.`
8. Find `reaspect` and set it to true if you want to reaspect the generated map images.
9. Find `defaultService` and set it to a default ArcIMS Service name. If the WMS client doesn't specify the Service, then this default Service will be used.
10. Save and close the file.

11. On Windows NT, click Start > Settings > Control Panel > Services; on Windows 2000, click Start > Settings > Control Panel > Administrative Tools > Component Services and click Services on the Tree tab; on Windows XP, choose Start > Control Panel > Performance and Maintenance > Administrative Tools > Component Services and click Services on the Tree tab.
12. Stop and Start your Web server.
13. To test that WMS is installed and working, open your browser and type:

    ```
    http://<local host>/servlet/com.esri.wms.Esrimap?Cmd=ping
    ```

    Note: If your Web server port is not set to the default port (port 80), then type the following:

    ```
    http://<local host>:<port#>/servlet/com.esri.wms.Esrimap?Cmd=ping
    ```

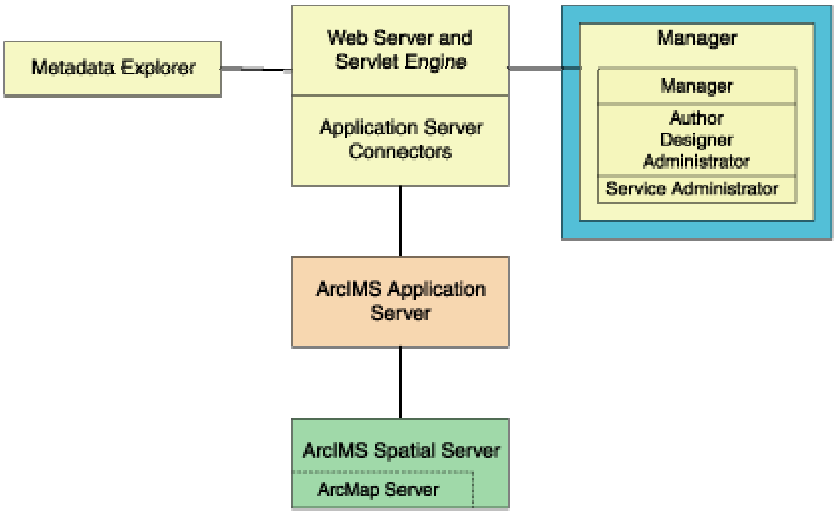
    The following should display: ArcIMS WMS-OGC Connector Version 4.0

For information on WMS, see ArcIMS Help.

Installing ArcIMS Manager Applications

In this installation scenario, ArcIMS Manager Applications—Author, Designer, and Administrator, along with ArcIMS Manager (the Web-based application)—can be installed on any computer on your network. ArcIMS Manager Applications do not require a Web browser.

ArcIMS Manager Applications (Author, Designer, and Administrator), may be used on any machine. It is recommended that ArcIMS Manager (the Web-based application) be used on your Web server machine. To use ArcIMS Manager on a machine other than your Web server machine, you must create a manager virtual directory on your Web server. For information on creating virtual directories, see Step 4: Configure your Web server for the Web server you are using.



ArcIMS Manager (including ArcIMS Manager Applications) is installed with the typical installation; you only need one ArcIMS Manager installation per site.

For more information on ArcIMS Manager and ArcIMS Manager Applications, see Overview.

Note: These instructions describe an ArcIMS Manager (including Manager Applications) installation only. To install the ArcIMS Host (ArcIMS Manager, Application Server Connectors, and ArcIMS Application Server), refer to Performing a typical installation.

To install ArcIMS Manager Applications

The ArcIMS Manager Applications installation procedure includes the following steps:

1. **Start the setup program**

   Follow these steps:

   1. Verify your site meets system requirements. For system requirement information see Step 1: Verify system requirements
   2. Log in as a user with administrator privileges.
   3. Ensure that a TEMP variable is set to a valid folder where you have write access and space available.
   4. Close all applications on your computer.

5. Insert the ArcIMS CD into the CD–ROM drive to automatically launch the setup program.

Manually running the setup program

Microsoft Windows 2000/XP

From Start > Settings > Control Panel > Add or Remove Programs, click Add New Programs (CD icon) on the left side of the display, then the CD or Floppy button. Browse for the setup.exe located on the ArcIMS CD.

Microsoft Windows NT

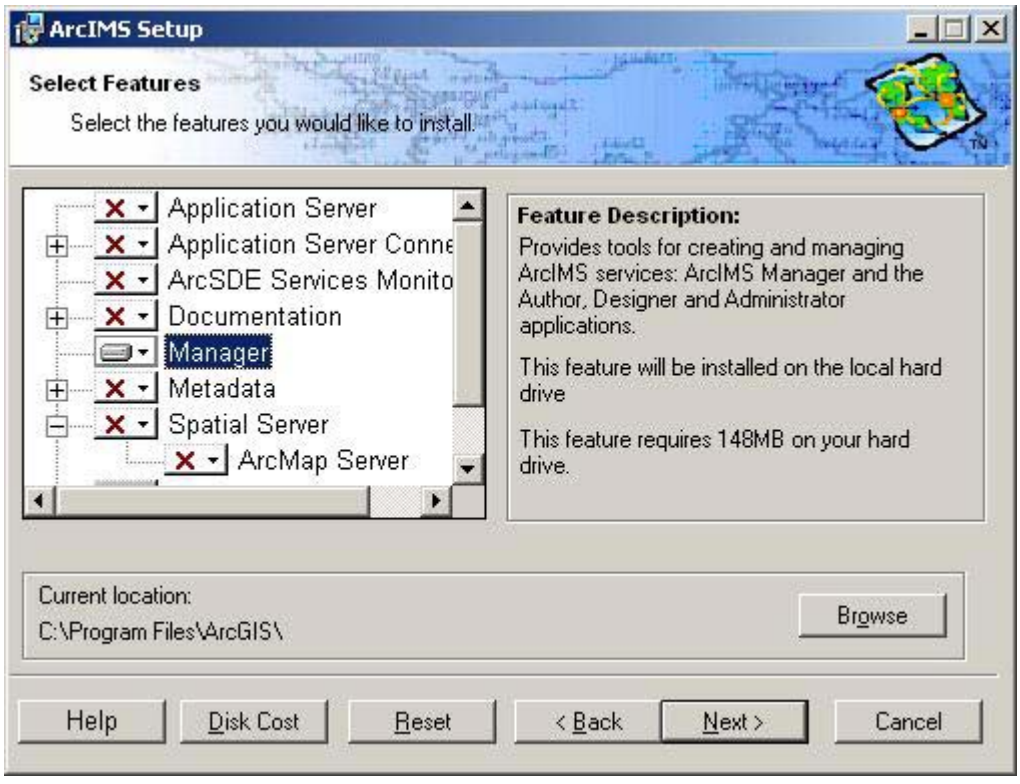
Go to Start > Settings > Control Panel > Add/Remove Programs. On the Install/Uninstall tab click the Install button. Click Next in the Install Program From Floppy Disk or CD–ROM dialog box. Browse for the setup.exe located on the ArcIMS CD.

Note: You may be prompted to install the Microsoft Windows Installer.

Note: If you do not have Internet Explorer 5.0.1 or higher and Microsoft Data Access Components 2.5 or higher, the install will optionally let you install MDAC 2.5. You must obtain and install Internet Explorer 5.0.1 or higher. Internet Explorer 5.0.1 or higher and MDAC 2.5 are required for ArcIMS ArcMap Server. Internet Explorer 5.0.1 or higher is also required for the ActiveX connector.

During the installation you will be asked to read the license agreement and accept it, or exit if you don't agree with the terms.

At the Select Features dialog box, select the Manager feature. Click the drop-down arrow to the left of the Manager feature that you would like to install. From the list, select Will be installed on local hard drive to install Manager. Installing Manager will install Manager and the Manager Applications (Author, Designer, and Administrator).



To complete the installation, follow the directions on your screen.

2. Complete the post installation setup

The following ArcIMS post installation options are required to successfully install Manager:

- ArcIMS Configuration

- J2SE JRE Configuration System (if a system J2SE JRE version 1.3.1 or higher is not detected on your system)

If you select a typical post installation setup, these post installation options are automatically selected. See the post installation topic for information on the post installation setup options.

NOTE: The setup stores the necessary configuration information to use the applications in the \profiles\username location of the user that installed ArcIMS (for Windows 2000 or Windows XP, C:\Documents and Settings\username; for Windows NT, C:\WINNT\Profiles\username). If you need alternate login accounts to use ArcIMS applications, copy the aimsdefault.properties file from the profiles\username folder of the account that installed ArcIMS to the \profiles\username folder of the alternate users. It is important to copy the file (which will have been updated during the initial installation) that resides in the installer's profile folder. The aimsdefault.properties file, located in the ArcIMS\Common installation location, contains default values and will not work.

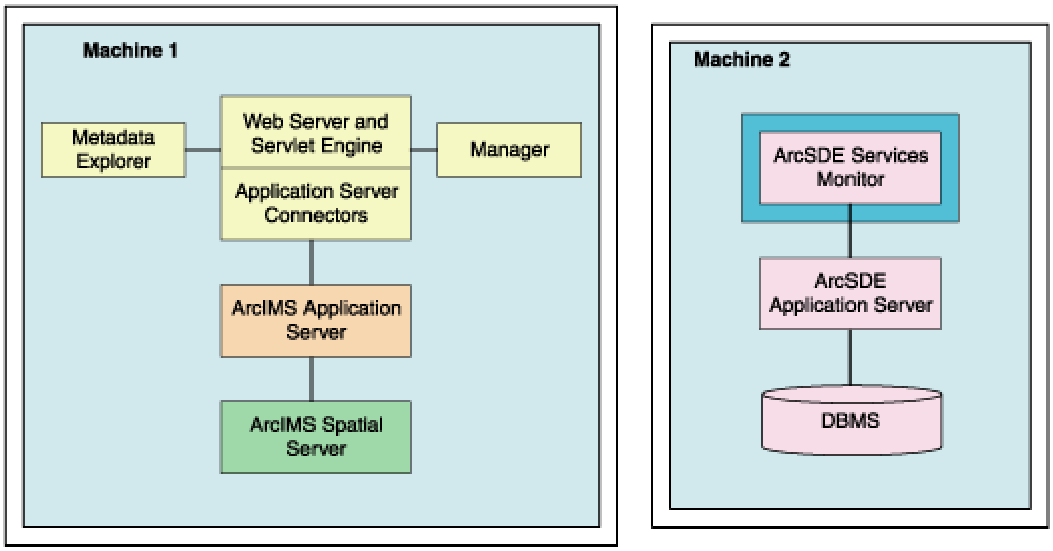
Installing ArcIMS Service Administrator

The ArcIMS Service Administrator is a remote site administration tool and can be used as an alternative to or in conjunction with ArcIMS Administrator. The ArcIMS Service Administrator uses the JavaServer Pages tag libraries and the Java API of the ArcIMS Java Connector. Java 2 Platform Standard Edition Software Development Kit is required for ArcIMS Service Administrator.

- The ArcIMS Service Administrator is installed with a typical installation and with an installation of Manager. If you plan to administer only ArcIMS Services, you need to
    1. Install ArcIMS using a typical installation. See Performing a typical installation.
    2. Configure ArcIMS Service Administrator for your Web server. See Configure your Web server for ArcIMS Service Administrator.
- The ArcIMS Service Administrator can also be used to administer ArcSDE. To administer ArcSDE on Windows, you need to do the following:
    1. Install the ArcSDE Services Monitor. See Installing ArcSDE Services Monitor.
    2. Configure ArcIMS Service Administrator for your Web server. See Configure your Web server for ArcIMS Service Administrator.

Installing ArcSDE Services Monitor

In this installation scenario, you install the ArcSDE Services Monitor on your ArcSDE computer. One computer, the ArcIMS Host, runs Web server software with ArcIMS Manager, ArcIMS Application Server, and Application Server Connectors, while on other computers, ArcIMS Spatial Server runs. All Spatial Servers must point back to the ArcIMS Host, and the ArcIMS Host must be able to communicate with the Spatial Servers.



There are three steps to setting up a multiple ArcIMS Spatial Server with ArcSDE Services Monitor configuration:

1. Installing and configuring the ArcIMS Host computer
2. Additional configuration of the ArcIMS Host machine
3. Installing ArcIMS ArcSDE Services Monitor

1. Installing and configuring your ArcIMS Host machine

To install and configure the ArcIMS Host (ArcIMS Manager, Application Server Connectors, and ArcIMS Application Server), refer to Performing a typical installation. To install the ArcIMS Host on a separate machine from ArcIMS Spatial Server, during the typical installation be sure to uncheck the Spatial Server feature so it will not be installed on your ArcIMS host machine. After successfully configuring your Web server (either during the post installation setup or manually) identify the following locations:

- **Output directory for Image Services:** You need to share the ArcIMS directory where the Output directory was created (for example, C:\ArcIMS) so that ArcIMS Spatial Servers can access this directory. This can automatically be done during the post installation setup on your host machine. See Website and Output directories, in the post installation setup for details.
- **Data directory:** Each ArcIMS Spatial Server must have access to all data. If the data is not stored in ArcSDE, you should put data on a common drive.
- **AXL directory:** You need to edit your map configuration files and ArcMap documents to reflect the common data drive.

2. Additional configuration of the ArcIMS Host machine

a. Share the Output directory so the ArcIMS Spatial Servers can access it. To allow the ArcIMS post installation setup to automatically share your ArcIMS Output directory for you, check the box to support multiple spatial servers on the ArcIMS Web sites and temporary output file dialog box.

   To manually share the directory, on Windows NT, go to Start > Programs > Windows NT Explorer; on Windows 2000 go to Start > Programs > Accessories > Windows Explorer; on Windows XP go to Start > All Programs > Accessories >

Windows Explorer. Then navigate to your output directory, right-click the directory, click Sharing, click Shared As, and click OK to share the directory.

b. Edit the Output directory location in your aimsdefaults.properties file. The aimsdefaults.properties file is stored in the \profiles\username location of the user that installed ArcIMS (for Windows 2000 or Windows XP, C:\Documents and Settings\username; for Windows NT, C:\WINNT\Profiles\username). If you requested multiple Spatial Server support in the post installation setup (as outlined in Step 1 above), this will have been done for you. You can edit this file by opening the file directly in a text editor, or through ArcIMS Administrator.

- To Edit the aimsdefaults.properties file using ArcIMS Administrator:

  Open ArcIMS Administrator, click View, and click Site Properties.

  In the Site Properties dialog box, click the Server Output tab and edit the output Directory Location. A UNC pathname is needed to specify the output directory (note: ArcIMS Administrator needs forward slashes in the UNC pathname):

  //<ArcIMS Host>/output

  Click OK to save the modified properties in the aimsdefaults.properties file.

- To Edit the aimsdefaults.properties file using a text editor:

  If necessary, edit the following property to reflect the universal naming convention (UNC) pathname (note the direction of the slashes):

  ```
  ImagePath=//<ArcIMS Host>/output
  ```

c. If you will be using the ArcIMS Services Administrator, you must configure your Output directory location in your sitePreferences.properties file. The sitePreferences.properties file is located on your Application Server machine stored in the <ArcIMS Installation Directory>\ArcIMS\AppServer directory. You can edit this file by opening the file directly in a text editor or through the Services Administrator.

- To edit the sitePreferences.properties file using the Services Administrator:

  Open the Services Administrator in your Web browser by typing `http://<ArcIMS Host>/esriadmin.` Click Configure Site.

  In the Output Directory field use the correct UNC pathname to specify the Output directory (note: Services Administrator needs forward slashes in the UNC pathname): //<ArcIMS Host>/output

- To edit the sitePreferences.properties file using a text editor:

  Edit the following property to reflect the UNC pathname (note the direction of the slashes):

  OutputDir=//<ArcIMS Host>/output

d. Edit your Web server Startup parameters:

Note: If you are using Microsoft IIS Web server, perform the steps provided below, instead of Steps i and ii below.

i. Change the Web service startup parameters. On Windows NT, click Start > Settings > Control Panel > Services; on Windows 2000, click Start > Settings > Control Panel > Administrative Tools > Component Services and click Services on the Tree tab; on Windows XP, click Start > Control Panel > Performance and Maintenance > Administrative Tools > Component Services and click Services on the Tree tab. Highlight your Web server and click Properties. Select log on. Click This Account and choose a network account. You cannot use a system account.

ii. Stop and Start your Web server.

Microsoft IIS Web server users:

If you are using Microsoft IIS Web server, perform the following instead of the steps in the preceding instructions:

For IIS 4.0, click Start > Programs > Windows NT Option Pack > Microsoft Internet Information Server > Internet Service Manager. For IIS 5.0, click Start > Settings > Control Panel > Administrative Tools > Internet Services Manager. For IIS 5.1 click Start > Control Panel > Administrative Tools > Internet Services Manager. Under your local host name, find Default Web Site. Click to highlight it. Click Action in the toolbar. From the drop-down menu, point to New and click Virtual Directory. Create a virtual directory for your output directory to <common output drive>:\output, for example, O:\output. Navigate to the output directory in Windows Explorer and select the Sharing tab from File > Properties. Select Permissions and add the account you will be using to log in to both the ArcIMS host machine, and the Spatial Server machine. Grant the account Full Access.

Note: IIS requires that users logged in as remote network users access the Web server from network access rights set in User Manager. This login method enables the user to access the server from a Web browser but doesn't give the user the right to log in locally. Users logged in with this method cannot access remote authenticated resources such as SQL Server using integrated security.

e. Share the data directory so the ArcIMS Spatial Servers can access the data referenced in the map configuration files. When determining the location to store your data, each ArcIMS Spatial Server must be able to access all data displayed in all ArcIMS Services; thus it is recommended that you locate your data in a common data directory—if it is not already stored in ArcSDE. This directory must be accessible from all spatial servers.

Note: In general, access to shapefiles is much faster if the shapefiles reside on the same computer as the ArcIMS Spatial Server.

To share the data directory, On Windows NT, go to Start > Programs > Windows NT Explorer; on Windows 2000, go to Start > Programs > Accessories > Windows Explorer; on Windows XP, go to Start > All Programs > Accessories > Windows Explorer. Then navigate to your data directory, right-click the directory, click Sharing, click Shared As, and click OK to share the directory.

f. Edit your map configuration files. The map configuration file stores the location of the data layers. This file must be edited to reflect the common data drive. Open the file in a text editor and edit the directory in the following lines to reflect the UNC pathname:

```
<WORKSPACES>

  <SHAPEWORKSPACE name="shp_ws-8" directory="\\<ArcIMS
    Host>.<domain>.com\ GISData" />

</WORKSPACES>
```

For ArcMap Server, use UNC paths to data in the ArcMap document.

3. To install ArcIMS ArcSDE Services Monitor

The ArcIMS ArcSDE Services Monitor installation procedure includes the following steps:

1. Start the setup program

Follow these steps:

1. Verify your site meets system requirements. For system requirement information see Step 1: Verify system requirements.
2. Log in as a user with administrator privileges.
3. Ensure that a TEMP variable is set to a valid folder where you have write access and space available.
4. Close all applications on your computer.
5. Insert the ArcIMS CD into the CD drive to automatically launch the setup program.

Manually running the setup program

Microsoft Windows 2000/XP

From Start > Settings > Control Panel > Add or Remove Programs, click Add New Programs (CD icon) on the left side of the display, then the CD or Floppy button. Browse for the setup.exe located on the ArcIMS CD.

Microsoft Windows NT

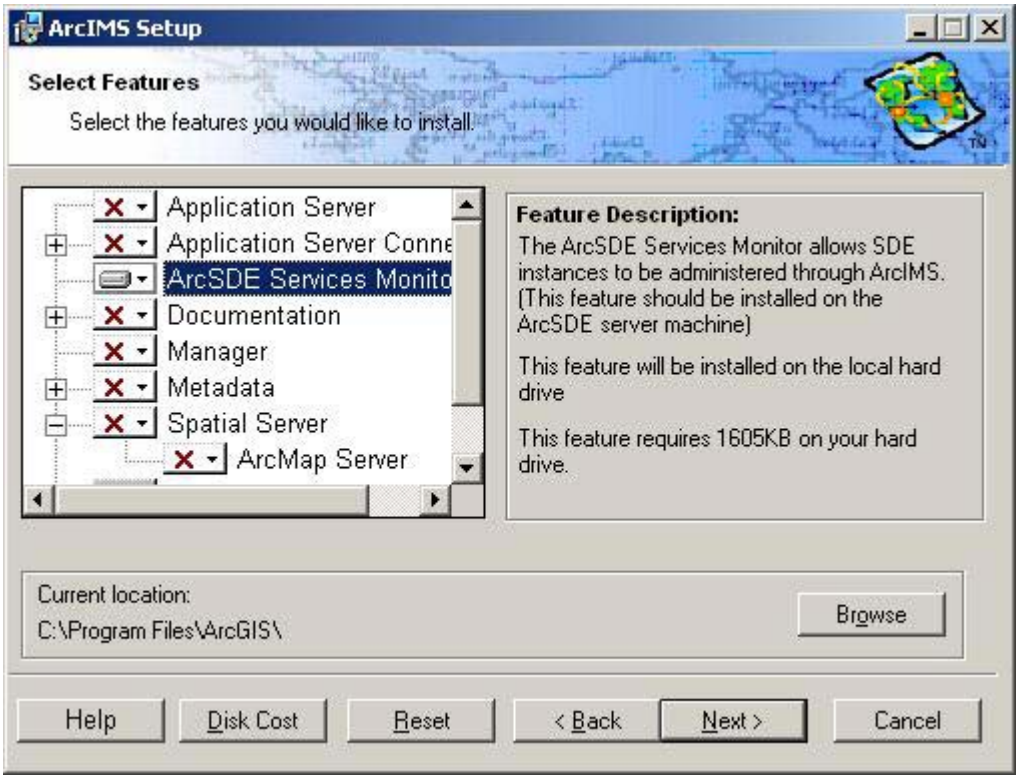
Go to Start > Settings > Control Panel > Add/Remove Programs. On the Install/Uninstall tab click the Install button. Click Next in the Install Program From Floppy Disk or CD–ROM dialog box. Browse for the setup.exe located on the ArcIMS CD.

Note: You may be prompted to install the Microsoft Windows Installer.

Note: If you do not have Internet Explorer 5.0.1 or higher and Microsoft Data Access Components 2.5 or higher, the install will optionally let you install MDAC 2.5. You must obtain and install Internet Explorer 5.0.1 or higher. Internet Explorer 5.0.1 or higher and MDAC 2.5 is required for ArcIMS ArcMap Server. Internet Explorer 5.0.1 or higher is also required for the ActiveX connector.

During the installation you will be asked to read the license agreement and accept it, or exit if you don't agree with the terms.

At the Select Features dialog box, select the ArcSDE Services Monitor feature. Click the drop-down arrow to the left of the ArcSDE Services Monitor feature. From the list, select Will be installed on local hard drive to install the ArcSDE Services Monitor.



To complete the installation, follow the directions on your machine.

Note: Microsoft's Java Virtual Machine 3186 or later is required for the ArcIMS Monitor Windows Service. The ArcIMS Monitor Service is installed with ArcSDE Services Monitor. The installation updates your system if Java Virtual Machine is not detected or if you have an earlier version.

2. Complete the post installation setup

The following ArcIMS post installation item is required to successfully install ArcSDE Services Monitor:

- ArcSDE Services Monitor Configuration

If you select a typical post installation setup, this post installation option is automatically selected. See the post installation topic for information on the post installation setup options.

3. Configure your Web server for ArcIMS Service Administrator

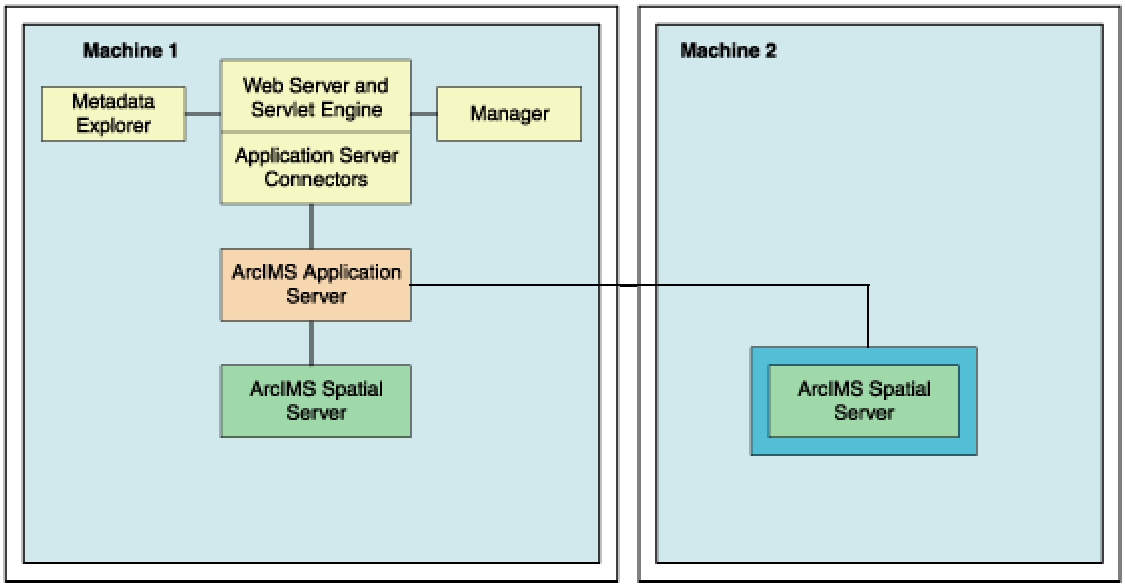
The ArcIMS Service Administrator presents a unified interface for managing ArcIMS and ArcSDE. If you want to use the ArcIMS Service Administrator to remotely administer ArcSDE Services, you must configure your Web Server.

If you choose to use the automated Web server-Servlet Engine configuration provided in the post installation setup, this step will be completed for you (see Web server-Servlet Engine configuration in post installation setup). If you manually configured your Web server and servlet engine (see Step 4: Configure your Web Server), you will need to also manually configure your Web server for ArcIMS Service Administrator.

NOTE: The setup stores the necessary configuration information to use the applications in the \profiles\username location of the user that installed ArcIMS (for Windows 2000 or Windows XP, C:\Documents and Settings\username; for Windows NT, C:\WINNT\Profiles\username). If you need alternate login accounts to use ArcIMS applications, copy the aimsdefault.properties file from the profiles\username folder of the account that installed ArcIMS to the \profiles\username folder of the alternate users. It is important to copy the file (which will have been updated during the initial installation) that resides in the installer's profile folder. The aimsdefault.properties file, located in the ArcIMS\Common installation location, contains default values and will not work.

Installing multiple ArcIMS Spatial Servers on additional computers

In this installation scenario, several computers run ArcIMS Spatial Server and communicate with the ArcIMS Host. One computer, the ArcIMS Host, runs Web server software with ArcIMS Manager, ArcIMS Application Server, and Application Server Connectors while, on other computers, ArcIMS Spatial Server runs. All ArcIMS Spatial Servers must point back to the ArcIMS Host, and the ArcIMS Host must be able to communicate with the ArcIMS Spatial Servers.



There are three steps to setting up a multiple ArcIMS Spatial Server configuration:

1. Installing and configuring the ArcIMS Host computer
2. Additional configuration of the ArcIMS Host machine
3. Installing ArcIMS Spatial Servers on additional computers

1. Installing and configuring your ArcIMS Host machine

To install and configure the ArcIMS Host (ArcIMS Manager, Application Server Connectors, and ArcIMS Application Server), refer to Performing a typical installation. To install the ArcIMS Host on a separate machine from ArcIMS Spatial Server, during the typical installation be sure to uncheck the Spatial Server feature so it will not be installed on your ArcIMS Host machine. After successfully configuring your Web server (either during the post installation setup or manually) identify the following locations:

- **Output directory for Image Services:** You need to share the ArcIMS directory where the Output directory was created (for example, C:\ArcIMS) so that ArcIMS Spatial Servers can access this directory. This can automatically be done during the post installation setup on your host machine. See Website and Output directories, in the post installation setup for details.
- **Data directory:** Each ArcIMS Spatial Server must have access to all data. If the data is not stored in ArcSDE, you should put data on a common drive.
- **AXL directory:** You need to edit your map configuration files and ArcMap documents to reflect the common data drive.

2. Additional configuration of the ArcIMS Host machine

a. Share the Output directory so the ArcIMS Spatial Servers can access it. To allow the ArcIMS post installation setup to automatically share your ArcIMS Output directory for you, check the box to support multiple spatial servers on the ArcIMS Web sites and the temporary output file dialog box.

To manually share the directory on Windows NT, go to Start > Programs > Windows NT Explorer; on Windows 2000, go to Start > Programs > Accessories > Windows Explorer; on Windows XP, go to Start > All Programs > Accessories > Windows Explorer. Then navigate to your output directory, right-click the directory, click Sharing, click Shared As, and click OK to share the directory.

b. Edit the Output directory location in your aimsdefaults.properties file. The aimsdefaults.properties file is stored in the \profiles\username location of the user that installed ArcIMS (for Windows 2000 or Windows XP, C:\Documents and Settings\username; for Windows NT, C:\WINNT\Profiles\username). If you requested multiple Spatial Server support in the post installation setup (as outlined in Step 1 above) this will have been done for you. You can edit this file by opening the file directly in a text editor or through ArcIMS Administrator.

- To Edit the aimsdefaults.properties file using ArcIMS Administrator, open ArcIMS Administrator, click View, and click Site Properties.

  In the Site Properties dialog box, click the Server Output tab and edit the output Directory Location. A UNC pathname is needed to specify the output directory (note: ArcIMS Administrator needs forward slashes in the UNC pathname): //<ArcIMS Host>/output

  Click OK to save the modified properties in the aimsdefaults.properties file.

- To Edit the aimsdefaults.properties file using a text editor:

  If necessary, edit the following property to reflect the universal naming convention pathname (note the direction of the slashes):

  ```
  ImagePath=//<ArcIMS Host>/output
  ```

c. If you will be using the ArcIMS Services Administrator, you must configure your Output directory location in your sitePreferences.properties file. The sitePreferences.properties file is located on your Application Server machine stored in the <ArcIMS Installation Directory>\ArcIMS\AppServer directory. You can edit this file by opening the file directly in a text editor, or through the Services Administrator.

- To edit the sitePreferences.properties file using the Services Administrator, open the Services Administrator in your Web browser by typing http://<ArcIMS Host>/esriadmin. Click Configure Site.

  In the Output Directory field use the correct UNC pathname to specify the Output directory (note: Services Administrator needs forward slashes in the UNC pathname): //<ArcIMS Host>/output

- To edit the sitePreferences.properties file using a text editor, edit the following property to reflect the universal naming convention pathname (note the direction of the slashes): OutputDir=//<ArcIMS Host>/output

d. Edit your Web server Startup parameters

Note: If you are using Microsoft IIS Web server, perform the steps provided below, instead of Steps i and ii below.

i. Change the Web service Startup parameters. On Windows NT, click Start > Settings > Control Panel > Services; on Windows 2000, click Start > Settings > Control Panel > Administrative Tools > Component Services and click Services on the Tree tab; on Windows XP, click Start > Control Panel > Performance and Maintenance > Administrative Tools > Component Services and click Services on the Tree tab. Highlight your Web server and click Properties. Select log on. Click This Account and choose a network account. You cannot use a system account.

ii. Stop and Start your Web server.

Microsoft IIS Web server users:

If you are using Microsoft IIS Web server, perform the following instead of the steps in the preceding instructions:

For IIS 4.0, click Start > Programs > Windows NT Option Pack > Microsoft Internet Information Server > Internet Service Manager. For IIS 5.0, click Start > Settings > Control Panel > Administrative Tools > Internet Services Manager. For IIS 5.1 click Start > Control Panel > Administrative Tools > Internet Services Manager. Under your local host name, find Default Web Site. Click to highlight it. Click Action in the toolbar. From the drop-down menu, point to New and click Virtual Directory. Create a virtual directory for your output directory to <common output

drive>:\output, for example, O:\output. Navigate to the output directory in Windows Explorer and select the Sharing tab from File > Properties. Select Permissions and add the account you will be using to log in to both the ArcIMS Host machine and the Spatial Server machine. Grant the account Full Access.

Note: IIS requires that users logged in as remote network users access the Web server from network access rights set in User Manager. This login method enables the user to access the server from a Web browser but doesn't give the user the right to log in locally. Users logged in with this method cannot access remote authenticated resources such as SQL Server using integrated security.

e. Share the data directory so the ArcIMS Spatial Servers can access the data referenced in the map configuration files. When determining the location to store your data, each ArcIMS Spatial Server must be able to access all data displayed in all ArcIMS Services; thus it is recommended that you locate your data in a common data directory—if it is not already stored in ArcSDE. This directory must be accessible from all spatial servers.

Note: In general, access to shapefiles is much faster if the shapefiles reside on the same computer as the ArcIMS Spatial Server.

To share the data directory on Windows NT, go to Start > Programs > Windows NT Explorer; on Windows 2000, go to Start > Programs > Accessories > Windows Explorer; on Windows XP, go to Start > All Programs > Accessories > Windows Explorer. Then navigate to your data directory, right-click the directory, click Sharing, click Shared As, and click OK to share the directory.

f. Edit your map configuration files. The map configuration file stores the location of the data layers. This file must be edited to reflect the common data drive. Open the file in a text editor and edit the directory in the following lines to reflect the UNC pathname:

```
<WORKSPACES>

  <SHAPEWORKSPACE name="shp_ws-8" directory="\\<ArcIMS
    Host>.<domain>.com\ GISData" />

</WORKSPACES>
```

For ArcMap Server, use UNC paths to data in the ArcMap document.

3. To install ArcIMS Spatial Server on additional computers

The ArcIMS Spatial Server installation procedure includes the following steps:

1. Start the setup program

Follow these steps:

1. Verify your site meets system requirements. For system requirement information see Step 1: Verify system requirements.
2. Log in as a user with administrator privileges.
3. Ensure that a TEMP variable is set to a valid folder where you have write access and space available.
4. Close all applications on your computer.
5. Insert the ArcIMS CD into the CD drive to automatically launch the setup program.

Manually running the setup program

Microsoft Windows 2000/XP

From Start > Settings > Control Panel > Add or Remove Programs, click Add New Programs (CD icon) on the left side of the display and click the CD or Floppy button. Browse for the setup.exe located on the ArcIMS CD.

Microsoft Windows NT

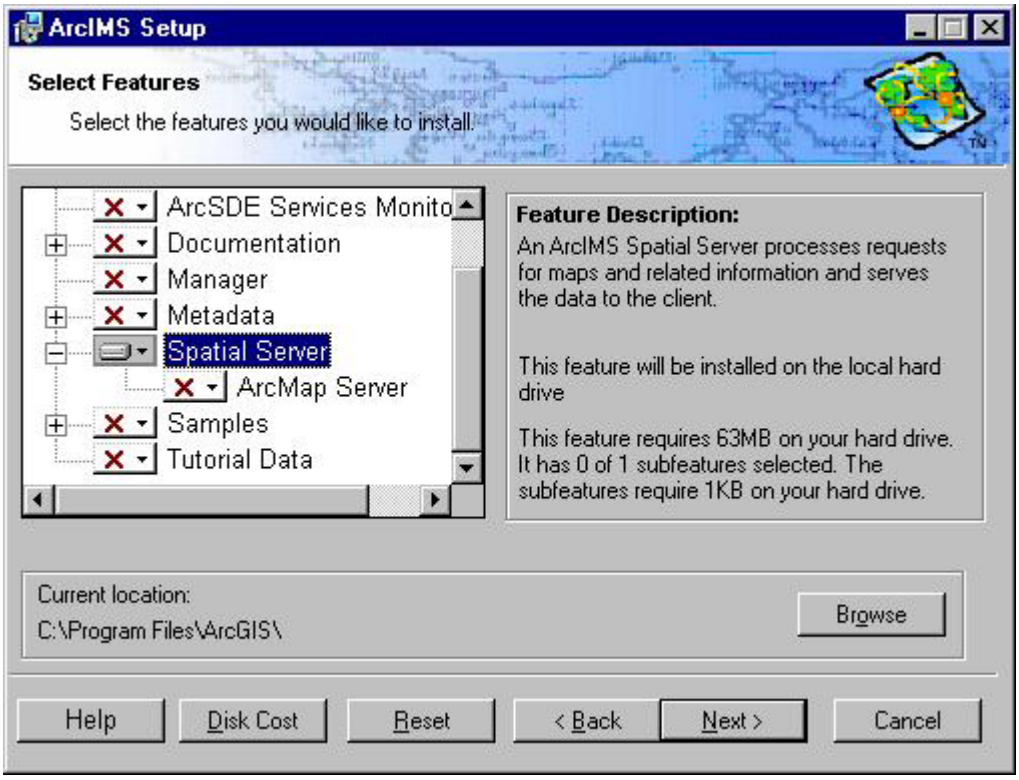
Go to Start > Settings > Control Panel > Add/Remove Programs. On the Install/Uninstall tab click the Install button. Click Next in the Install Program From Floppy Disk or CD–ROM dialog box. Browse for the setup.exe located on the ArcIMS CD.

Note: You may be prompted to install the Microsoft Windows Installer.

Note: If you do not have Internet Explorer 5.0.1 or higher and Microsoft Data Access Components 2.5 or higher, the install will optionally let you install MDAC 2.5. You must obtain and install Internet Explorer 5.0.1 or higher. Internet Explorer 5.0.1 or higher and MDAC 2.5 are required for ArcIMS ArcMap Server. Internet Explorer 5.0.1 or higher is also required for the ActiveX connector.

During the installation you will be asked to read the license agreement and accept it, or exit if you don't agree with the terms.

At the Select Features dialog box, expand the Spatial Server feature by clicking the + sign to view the subfeatures. Click the drop-down arrow to the left of the Spatial Server feature. From the list, select Will be installed on local hard drive to install the ArcIMS Spatial Server.



To complete the installation, follow the directions on your machine.

Note: Microsoft's Java Virtual Machine 3186 or later is required for the ArcIMS Monitor Windows Service. The ArcIMS Monitor Service is installed with ArcIMS Spatial Server. The installation updates your system if Java Virtual Machine is not detected or if you have an earlier version.

2. Complete the post installation setup

The following ArcIMS post installation options are required to successfully install ArcIMS Spatial Server:

- ArcIMS Configuration

If you select a typical post installation setup, this post installation option is automatically selected. See the post installation topic for information on the post installation setup options.

There is no need to configure your Web server or configure ArcIMS. Those steps are not necessary when only installing ArcIMS Spatial Server.

After installing ArcIMS Spatial Server, see *Using ArcIMS,* 'Administering your site,' for details on how to administer the ArcIMS Spatial Server.

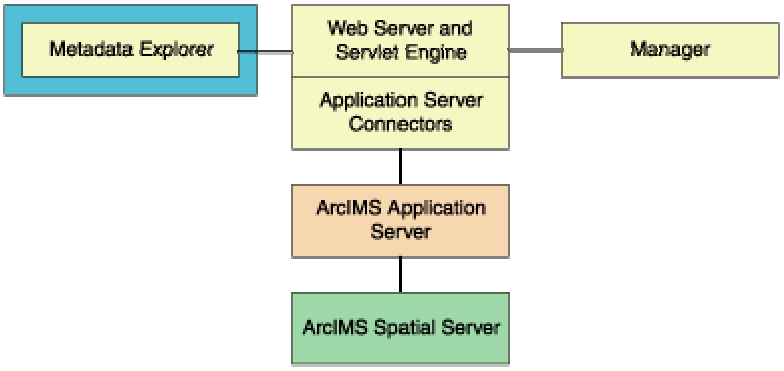
See ArcIMS Help for more information on configuring your Web site.

Note: When you install ArcIMS Spatial Servers on a system where you already have an existing ArcIMS 4.0 site configuration, you need to manually add a Metadata Server virtual server. See *Using ArcIMS* for details on configuring virtual servers for ArcIMS.

NOTE: The setup stores the necessary configuration information to use the applications in the \profiles\username location of the user that installed ArcIMS (for Windows 2000 or Windows XP, C:\Documents and Settings\username; for Windows NT, C:\WINNT\Profiles\username). If you need alternate login accounts to use ArcIMS applications, copy the aimsdefault.properties file from the profiles\username folder of the account that installed ArcIMS to the \profiles\username folder of the alternate users. It is important to copy the file (which will have been updated during the initial installation) that resides in the installer's profile folder. The aimsdefault.properties file located in the ArcIMS\Common installation location contains default values and will not work.

Installing ArcIMS Metadata Explorer

In this installation scenario, you install Metadata Explorer and Gazetteer data to view metadata from an ArcIMS Metadata Service.



Note: These instructions describe a Metadata Explorer and Gazetteer data installation only. To install the ArcIMS Host (ArcIMS Manager, Application Server Connectors, and ArcIMS Application Server), refer to Performing a typical installation.

The following are required to successfully install Metadata Explorer:

- Java 2 Platform Standard Edition Software Development Kit
- Metadata Explorer installed on your Web server machine

To install ArcIMS Metadata Explorer

The ArcIMS Metadata Explorer installation procedure includes the following steps:

1. **Start the setup program**

   Follow these steps:

   1. Verify your site meets system requirements. For system requirement information see Step 1: Verify system requirements.
   2. Log in as a user with administrator privileges.
   3. Ensure that a TEMP variable is set to a valid folder where you have write access and space available.
   4. Close all applications on your computer.
   5. Insert the ArcIMS CD into the CD drive to automatically launch the setup program.

   Manually running the setup program

   Microsoft Windows 2000/XP

   From Start > Settings > Control Panel > Add or Remove Programs, click Add New Programs (CD icon) on the left side of the display and click the CD or Floppy button. Browse for the setup.exe file located on the ArcIMS CD.

   Microsoft Windows NT

   Go to Start > Settings > Control Panel > Add/Remove Programs. On the Install/Uninstall tab click the Install button. Click Next in the Install Program From Floppy Disk or CD–ROM dialog box. Browse for the setup.exe file located on the ArcIMS CD.

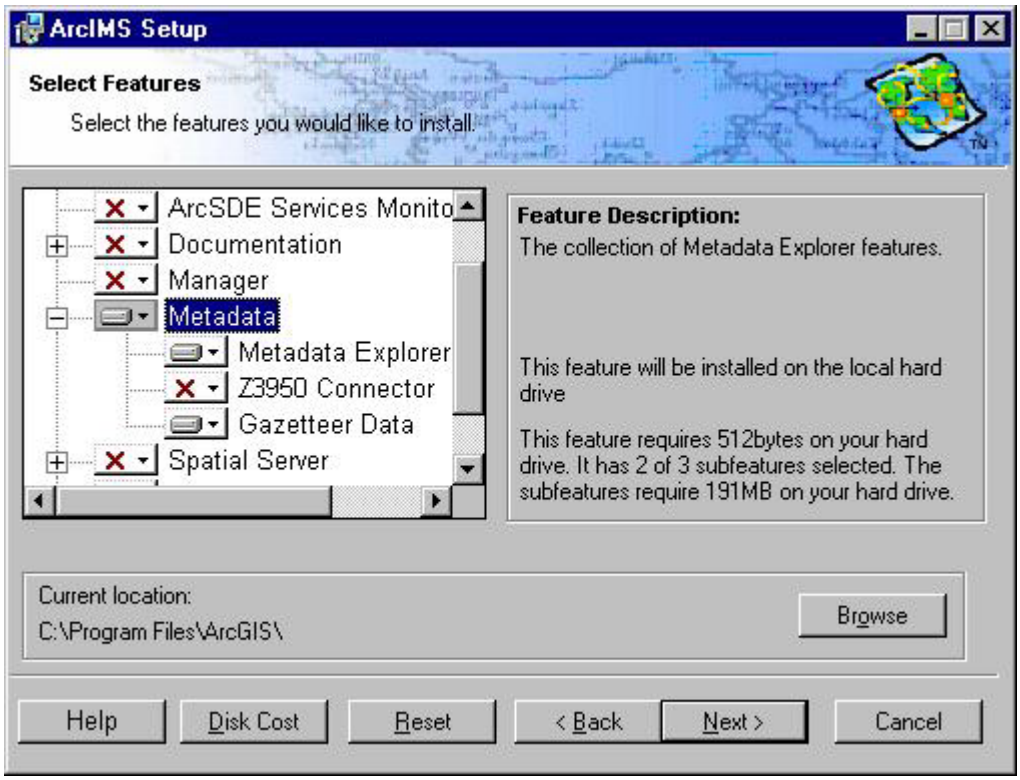
   Note: You may be prompted to install the Microsoft Windows Installer.

   Note: If you do not have Internet Explorer 5.0.1 or higher and Microsoft Data Access Components 2.5 or higher, the install will optionally let you install MDAC 2.5. You must obtain and install Internet Explorer 5.0.1 or higher. Internet

Explorer 5.0.1 or higher and MDAC 2.5 are required for ArcIMS ArcMap Server. Internet Explorer 5.0.1 or higher is also required for the ActiveX connector.

During the installation you will be asked to read the license agreement and accept it, or exit if you don't agree with the terms.

At the Select Features dialog box, expand the Metadata feature by clicking the + sign to view the subfeatures. The Metadata feature contains the Z39.50 Connector, Gazetteer Data, and Metadata Explorer Application subfeatures. Click the drop-down arrow to the left of the Metadata subfeature that you would like to install. From the list, select Will be installed on local hard drive to install the selected Metadata feature.



To complete the installation, follow the directions on your machine.

Metadata Explorer files are installed at <ArcIMS Installation Directory>\ArcIMS\metadata\metadataexplorer.

See *Creating and Using Metadata Services* for information on Metadata Explorer.

2. **Post installation setup option:**

   The following ArcIMS post installation option is required to successfully install ArcIMS Metadata Explorer:

   - Web server-Servlet Engine configuration

   You need to configure your Web server to use ArcIMS Metadata Explorer.

   If you choose to use the automated Web server-Servlet Engine configuration provided in the post installation setup, this step will be completed for you (see Web server-Servlet Engine configuration in the post installation setup). If you manually configure your Web server and servlet engine (see Step 4: Configure your Web Server) you will need to also manually configure your Web server for ArcIMS Metadata Explorer. For information on manually configuring your Web server for ArcIMS Metadata Explorer, see Configure your Web server to use ArcIMS Metadata Explorer.

Note: If you choose to install the Z39.50 Connector, you will need to configure the connector before you can use it. See Configuring the Z39.50 connector.

NOTE: The setup stores the necessary configuration information to use the applications in the \profiles\username location of the user that installed ArcIMS (for Windows 2000 or Windows XP, C:\Documents and Settings\username; for Windows NT, C:\WINNT\Profiles\username). If you need alternate login accounts to use ArcIMS applications, copy the aimsdefault.properties file from the profiles\username folder of the account that installed ArcIMS to the \profiles\username folder of the alternate users. It is important to copy the file (which will have been updated during the initial installation) that resides in the installer's profile folder. The aimsdefault.properties file, located in the ArcIMS\Common installation location, contains default values and will not work.

Configuring the Z39.50 Connector

The Z39.50 Connector must be installed prior to configuring. For information on installing the Z39.50 Connector, see Installing Metadata Explorer.

To configure ArcIMS with Z39.50, perform the following:

1. In a text editor, open z3950.properties.

   <ArcIMS Installation Directory>\ArcIMS\Metadata\Z3950Connector\z3950.properties

2. If necessary, change the port number the Z39.50 Connector will use.

   port=210

   The default port number is 210, but it can be modified depending on your network configuration.

3. Edit defaultServiceName=MyMetadataService to match your Metadata Service name.

   If you have not created your Metadata Service yet, accept the default value and edit the property as necessary at a later date.

   See Creating and Using Metadata Services for details on creating the necessary Metadata Service.

4. The default connection type is HTTP. If utilizing TCP/IP connection protocols, proceed to Step 7 below.

   connectionType=http

5. If browsing of the Metadata Service used in Step 3 is restricted by user name and password, set these values. The user name and password remain blank if browse access is unrestricted.

   username=

   password=

   If you have not created your Metadata Service yet, accept the default blank values and edit the property as necessary at a later date.

   See Creating and Using Metadata Services or ArcIMS Help for details on the methods used to restrict access to services.

   Proceed to Step 7.

6. If connectionType=http in Step 4 above, proceed to Step 7.

   connectionType=tcp,

7. Save and close the file.

8. On Windows NT, click Start > Settings > Control Panel > Services;

   On Windows 2000, click Start > Settings > Control Panel > Administrative Tools > Component Services and click Services on the Tree tab;

   On Windows XP, click Start > Control Panel > Performance and Maintenance > Administrative Tools > Component Services and click Services on the Tree tab.

9. Start the ArcIMS Z3950 4.0 service listed in the Services window.

Installation of the Z39.50 Connector is complete. However, the connector is not functional until you have loaded the required Z39.50 specifications into your ArcSDE metadata tables. This step cannot be performed until you have created your Metadata Service. If you already have your Metadata Service created and in place, proceed to the next section, Loading the Z39.50 specifications. If not, see *Creating and Using Metadata Services* for details on setting up your Metadata Service and loading the Z39.50 specifications into your metadata tables.

Note: If you are using TCP/IP, the connector must also be configured for authentication of users. Detailed steps are provided in *Creating and Using Metadata Services*.

Loading the Z39.50 specifications

The following step cannot be performed until you have created your Metadata Service. If you have not created your service, see *Creating and Using Metadata Services* for details on creating your Metadata Service and loading the Z39.50 specifications into your metadata tables.

Execute the command-line utility that loads the necessary Z39.50 parameters into your SDE metadata tables. It's located at:

- <ArcIMS Installation Directory>\ArcIMS\Metadata\Commands\MDZCodeLoader.exe

  Command usage:

  ```
  mdzcodeloader.exe <input_file> <sde_server_machine> <sde_instance> <database>
  <username> <password> {table_name_prefix} {logfile}
  ```

- <input_file>: The information to load ArcSDE tables is defined in two files—GEO_mandatory.xml and GEO_expanded.xml. For setting up a basic configuration, use GEO_mandatory.xml as your input file. See Creating and Using Metadata Services for details on these files.
- `<sde_server_machine>:` The name of the ArcSDE host machine.
- `<sde_instance>:` The service or port number for ArcSDE.
- `<database>:` The ArcSDE database name. Use the same database name used in the `<SDEWORKSPACE>` element of your Metadata Service configuration file (*.axl). Use "" or # to accept the default value
- `<username>:` The ArcSDE database username. Use the same username used in the `<SDEWORKSPACE>` element of your Metadata Service configuration file (*.axl).
- `<password>:` The ArcSDE database password. Use the same password used in the `<SDEWORKSPACE>` element of your Metadata Service configuration file (*.axl).
- `{table_name_prefix}:` The prefix name for your metadata tables in ArcSDE. Use the same prefix used in the `<TABLE_NAME>` element of your Metadata Service configuration file (*.axl). The default prefix name for ArcIMS metadata tables, IMSMETADATA will be used if you don't specify a prefix name in your command.
- `{logfile}:` File name used to log any errors generated during the loading of the Z39.50 data. The default name, mdzcodeloader.log, will be used if you don't specify one in your command.

  For example:

  ```
  mdzcodeloader GEO_mandatory.xml my.sde.machine 5151 "" user123 pass456 mymetadata
  ```

Installing ArcIMS automatically

The ArcIMS automatic setup allows you to specify values from a configuration file (autosetup.cfg) or using the command line. This method gives you the ability to install ArcIMS without user interaction or prompts. A default autosetup.cfg file is available on the root of the CD.

To perform an automatic installation of ArcIMS

1. Copy the autosetup.cfg file from the ArcIMS CD to your local machine or to a machine on the network.
2. Open the autosetup.cfg file with a text editor (for example, Notepad). Do not open this file using Microsoft Word or Wordpad, as these programs may insert special control characters that may corrupt this file.
3. Edit the following parameters in the autosetup.cfg file (Information on editing this file is also provided within the autosetup.cfg file):

Parameter	Description
ADMIN_USERNAME	A user with administrative privileges. This can be the user currently logged in or a different user.
ADMIN_PASSWORD	The password of the user name specified in ADMIN_USERNAME.
ADMIN_DOMAIN	The domain name of the machine running Autosetup. If the machine is not joined to a domain, the machine name should be specified.
INSTALL_DIR	The installation drive and folder where ArcIMS is to be installed.
INSTALL_TYPE	Specify either "Typical" or "Complete" as the install type. A Typical install includes only the most common features. A Complete install includes all features.

4. After editing the autosetup.cfg file, save and close it.
5. Click Start > Run, or open a command prompt, and type:

   <CD Drive>:\Setup.exe /M=<location of autosetup.cfg file>

   For example, `F:\Setup.exe /M=C:\temp\autosetup.cfg`

   The /M value is the location of the autosetup.cfg file containing the parameters for this installation. You *must* specify the fully qualified pathname to the configuration file. The configuration file does not have to reside in the same location as the setup.exe. The autosetup.cfg can be copied to your local machine, or you can use an autosetup.cfg file that exists elsewhere on your network.

   An autosetup.cfg file must be used; however, the user name, password, and/or domain values can alternately be specified on the command line when running the setup.exe as follows:

   <CD Drive>:\Setup.exe /M=<location of autosetup.cfg file> /user=<username> /pwd=<password> /domain=<domain>

   For example: `F:\Setup.exe /M=C:\temp\autosetup.cfg /user=imsuser /pwd=imuserpwd /domain=mydomain`

6. The automatic setup updates system files, reboots, and automatically logs onto the machine using the user name and password specified.

Important automatic installation notes

- Values provided in the configuration file take precedence over any command line parameters. If a user name is specified in the configuration file and a different name is specified on the command line, the user name in the configuration file will be used for the installation.
- No previous version of ArcIMS or ArcIMS Viewer can exist on the installation machine. You must manually uninstall any previous version before attempting an automatic installation. If ArcGIS Desktop or Workstation is installed on this machine, ArcMap Server cannot be installed.
- You may access setup.exe from a mapped network drive, Network Neighborhood, or UNC paths (\\machine_name\).
- If required, a license manager must exist on your machine or on your network. The automatic installation does not alow you to install a license manager.

Step 3b: Post installation overview

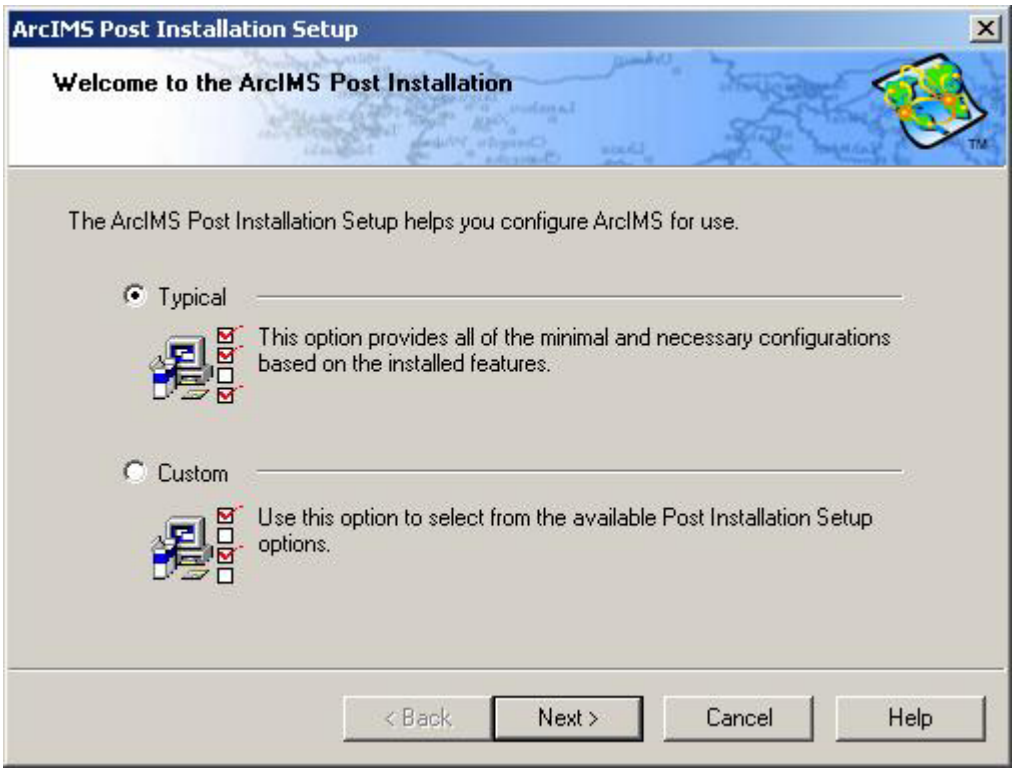
You must complete the ArcIMS post installation setup to successfully configure your ArcIMS installation for use. To see which ArcIMS property files were edited during the post installation setup see the <ArcIMS Installation Directory>/ArcIMS/Tools/properties.log file.

NOTE: Before running the post installation setup, make sure your Windows Services Manager is closed.

Complete the post installation during the initial installation, or you can run the post installation setup at a later time from Start > Programs > ArcGIS > ArcIMS > ArcIMS Post Installation.

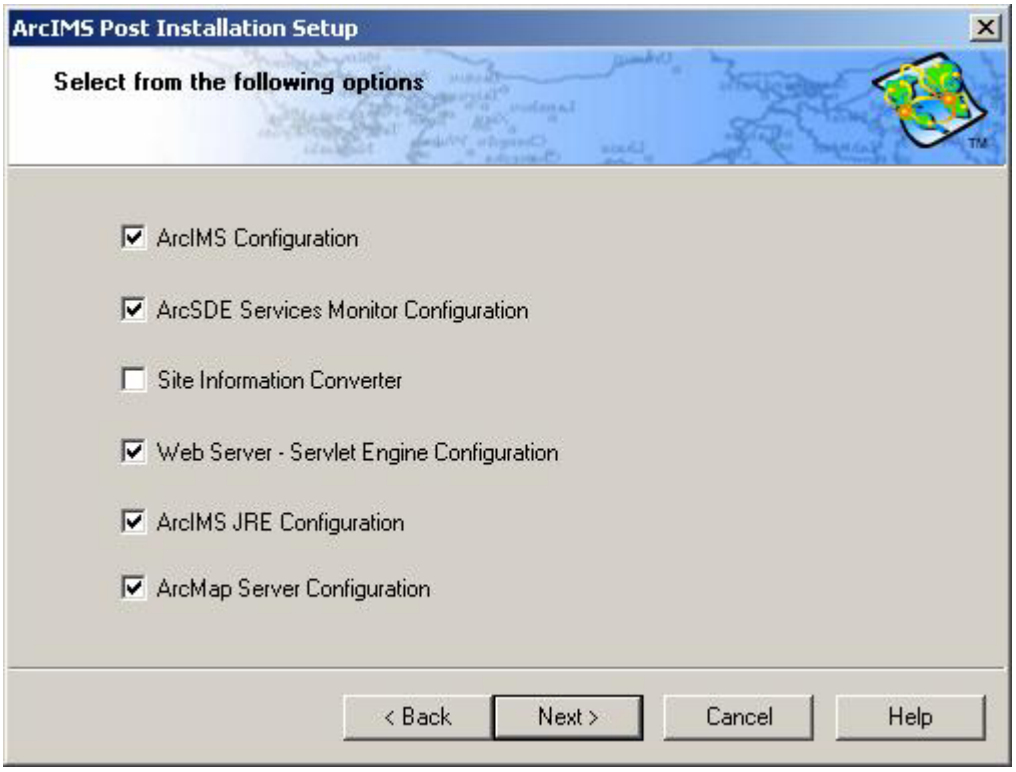
If using a Backup Domain Controller machine, the user running the post installation setup must be granted Log on as service rights prior to running the post installation setup.

Choose a Typical or a Custom post installation setup.



A typical post installation setup will guide you through the basic configurations for the features you installed. A typical post installation setup will automatically choose the necessary post installation options required for your installation.

Select a Custom installation to choose from any of the available post installation setup options.



The available post installation setup options depend on what features were installed. If a post installation setup option is unavailable it will be disabled.

ArcIMS 4.0.1 offers the following post installation setup options:

- ArcIMS Configuration
- ArcSDE Services Monitor Configuration
- Site Information Converter
- Web server-Servlet Engine Configuration
- ArcIMS J2SE JRE Configuration
- ArcMap Server Configuration

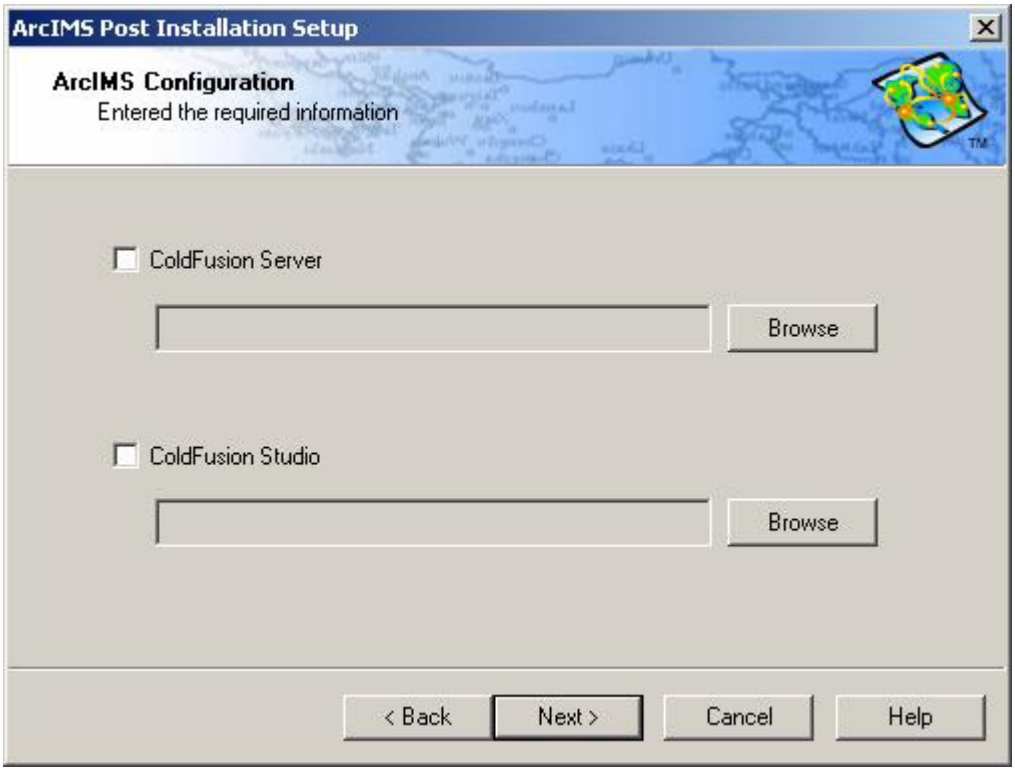
ArcIMS configuration

Selecting the ArcIMS Configuration post installation setup option will configure any of the following, depending on what features you installed:

- ColdFusion Connector (if the ColdFusion Connector was installed)
- Website and Output directories
- Working directory, Web server host name, and protocol
- Host name, registry port, and client port for Application Server communication
- ArcIMS services

1. **Specify ColdFusion installation information.**

   If the ColdFusion Connector was installed you will need to provide the location of ColdFusion Server or ColdFusion Studio. The ArcIMS Application Server Connectors must be installed on the Web Server machine.



   The ArcIMS ColdFusion extension libraries are installed at<ColdFusion Server Installation Directory>\bin.

   The ArcIMS custom tag files are installed at <ColdFusion Server Installation Directory>\CustomTags.

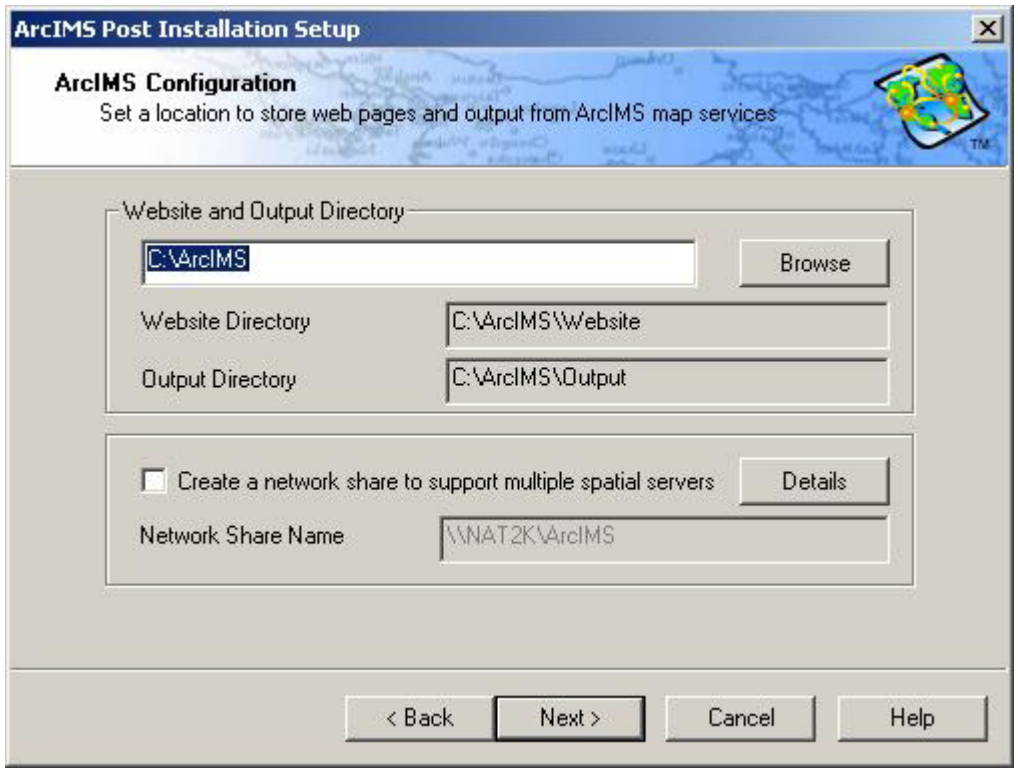
   The ActiveX Connector does not require post installation configuration.

   The ArcIMS ActiveX libraries are installed at <ArcIMS Installation Directory>\ArcIMS\Connectors\ActiveX.

   The Java Connector does not require post installation configuration.

   The JAR files required to use the Java Connector are installed at <ArcIMS Installation Directory>\ArcIMS\Connectors\Java_Connector. They are arcims_jconnect.jar, jcert.jar, jnet.jar, and jsse.jar.

2. **Set a location to store ArcIMS Web sites and temporary output files.**



Your ArcIMS Web sites will be stored in the Website directory. Temporary runtime files will be created in the Output directory. Provide a location to store your ArcIMS Web sites and output files, or accept the default location. The default location to create these directories is C:\ArcIMS. A Website and Output directory will be created in the location provided.

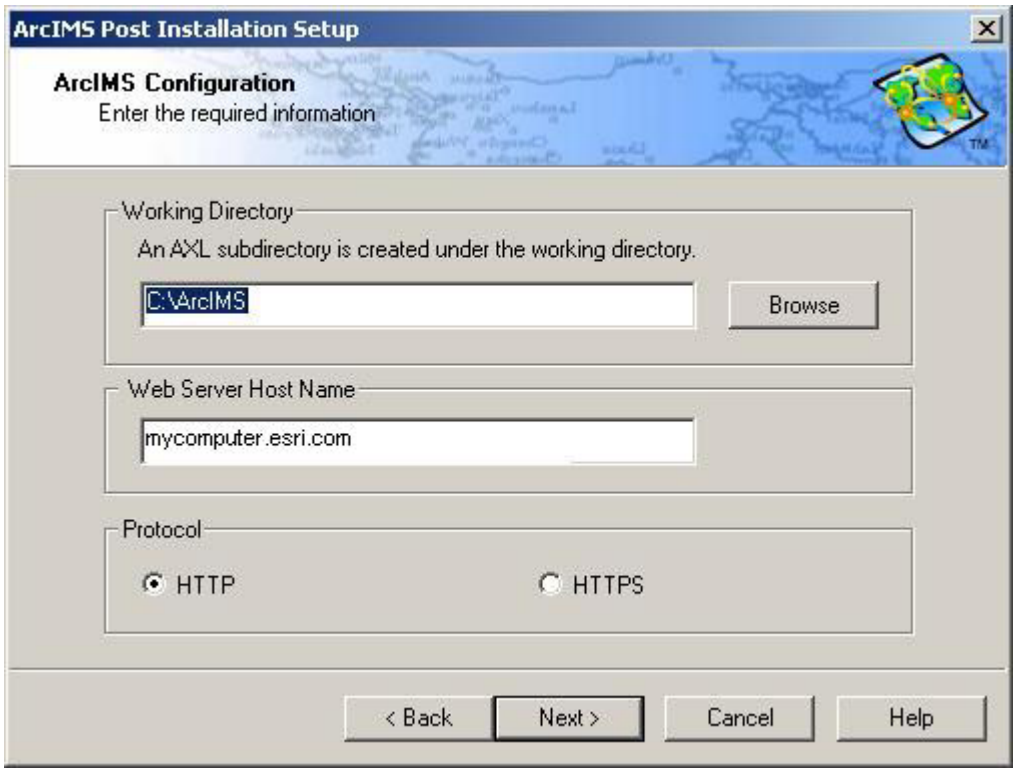
NOTE: It is recommended that you create the Output and Website directories on the machine where your Web server is installed. However, this is not a requirement, you may browse to any machine to create Output and Website directories. If you create a number of Output and Website directories, only one set of these will be used by ArcIMS. ArcIMS will use the Output and Website directories that have virtual directories associated with them. Output and Website virtual directories will be created in the Web Server-Servlet Engine Configuration of the post installation setup.

Note: Unless you browse to your Web server root directory you must create virtual directories for your Website and Output directories. The Web server-Servlet Engine configuration in the post installation setup will perform this for you, or see Step 4: Configure your Web server for manual instructions.

Note: WebLogic users must set the Website and Output directories to the WebLogic documentation root directory, since virtual directories cannot be created for WebLogic: \bea\wlserver6.1\config\mydomain\applications\DefaultWebApp.

If you are installing multiple spatial servers or spatial servers on a different machine to your Web Server, you can check the box on this dialog to create a network share of your Website and Output directory (the default directory is C:\ArcIMS). See Installing multiple ArcIMS Spatial Servers for information on installing ArcIMS Spatial Servers and setting up your ArcIMS Host Machine.

3. **Provide a working directory, Web server host name and protocol.**

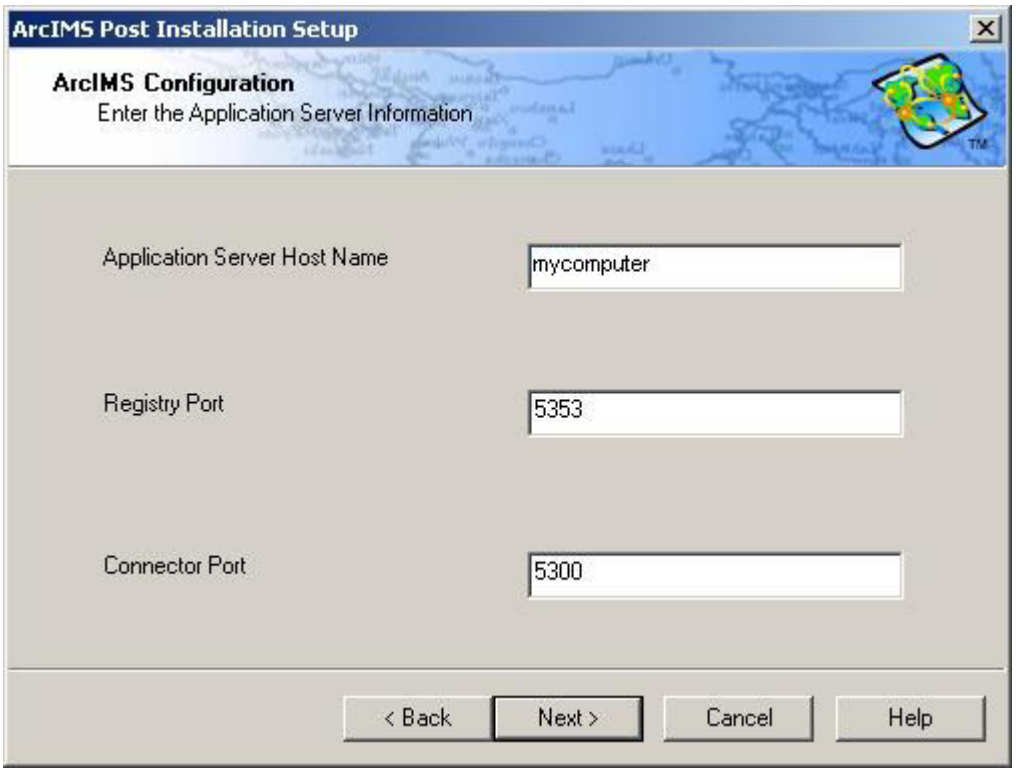


A working directory (AXL directory) is created where your ArcIMS project files will be stored. The default location for the working directory is C:\ArcIMS.

Enter the name of the machine where the Web server for ArcIMS is installed. By default your machine name has been entered as your Web server host name. If you are setting up an Internet Web site or multiple ArcIMS Spatial Servers, you must append your domain name to your Web server host name, for example, mycomputer.esri.com. If your Web server has a port number other than the default HTTP port (80), then the Web server host name should use the syntax, Web server name:port number, for example, mycomputer.esri.com:81. The Web server host name must be the same as the name provided when the Web server was configured. If you are uncertain of your Web server host name, contact your system administrator.

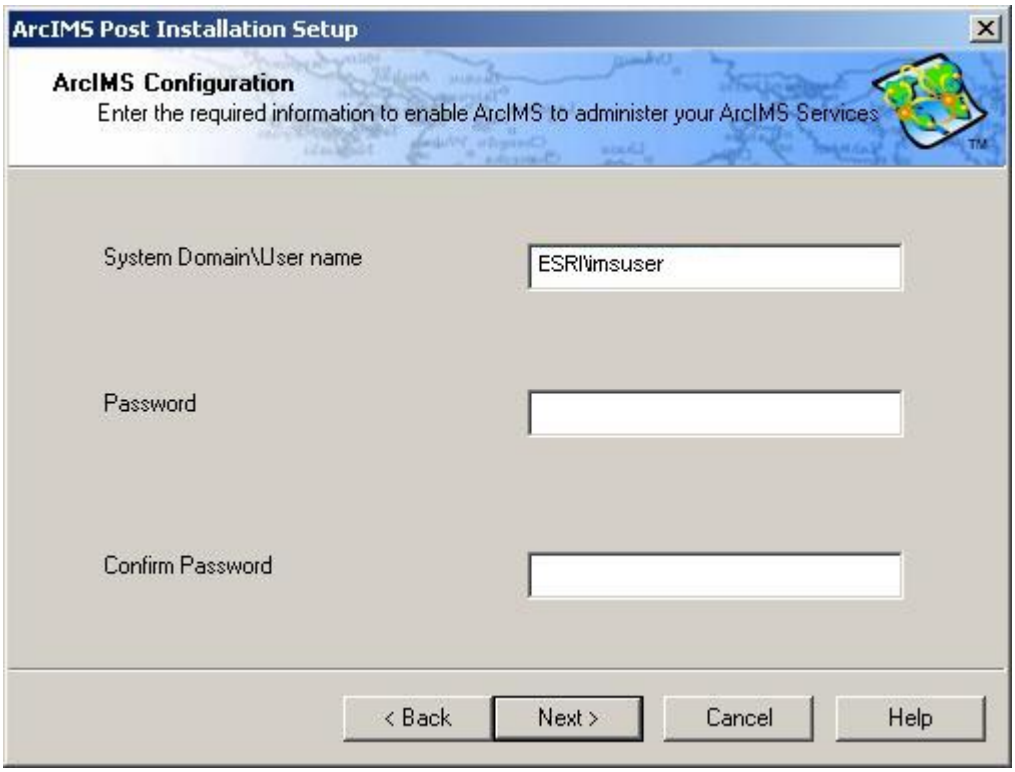
For Protocol, specify HTTP or HTTPS protocol.

4. **Provide Host Name, Registry Port, and Client Port.**



Enter the name of the machine where the Application Server is installed. Your machine name is provided as your Application Server host name by default. To find the host name of your machine, open a Command Prompt and type host name. The Registry Port default is 5353. The ArcIMS Spatial Server, Monitor, and Tasker communicate with the ArcIMS Application Server via the Registry port. The Client port default is 5300. The Servlet Connector and ArcIMS Application Server communicate via the Client port.

5. **Provide user name and password for ArcIMS services authorization.**

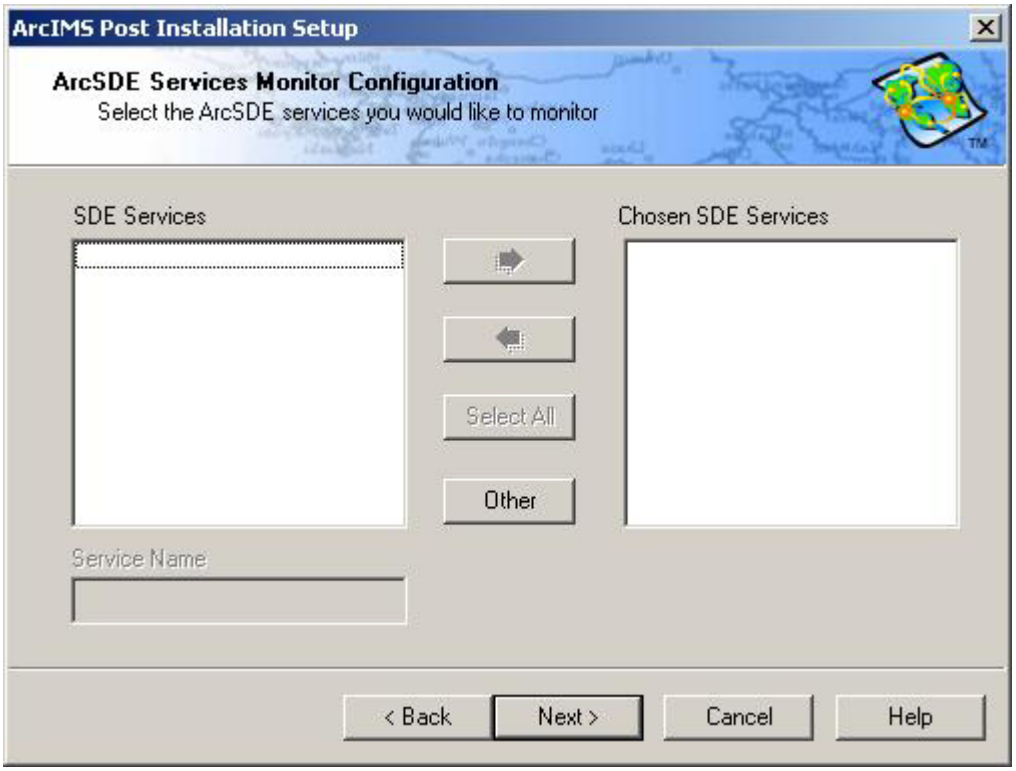


The user name and password are required to start ArcIMS services (ArcIMS Application Server, ArcIMS Monitor, and ArcIMS Tasker) and gives the ArcIMS Spatial Server the necessary privileges to access resources on the local computer and/or network. The user name should include the domain and the user name of the ArcIMS installation account, for example, esri\ArcIMS. The user account must have administrator privileges. By default the domain and user name of the account installing ArcIMS are provided.

ArcSDE Services Monitor configuration

Valid ArcSDE services can be monitored by the ArcSDE Services Monitor. If the ArcSDE Services Monitor was selected to be installed, the ArcSDE Services Monitor Configuration will be available as a post installation setup option.

1. **Select the ArcSDE services you want to be monitored**



The ArcIMS post installation setup checks for valid ArcSDE services in the ArcSDE services.sde file and in the Windows registry under \HKEY_LOCAL_MACHINE\SOFTWARE\ESRI\ArcInfo\ArcSDE\8.0\ArcSDE for <dbms type>. Valid ArcSDE services found will be listed under SDE services. Select the ArcSDE service you would like to monitor and click the -----> button. To monitor a valid ArcSDE service that is not listed, use the Other button. When a valid ArcSDE service is chosen, the post installation setup will edit the <ArcIMS Installation Directory>\ArcIMS\Server\monitor\sde.properties file with the following parameters:

- `instanceNames=<your ArcSDE Service name>`
- `portNumbers=<your ArcSDE Service port>`
- `sdehomes=<your ArcSDE Service's Home>`

The installer will also edit the Monitor.properties file located at <ArcIMS Installation Directory>\ArcIMS\Server\monitor and uncomment this line: `sdePropertiesFilename=Sde.properties`

If you have a typo or error in either of these files, when you reboot or attempt to start the ArcIMS Monitor, your ArcIMS Monitor may not start.

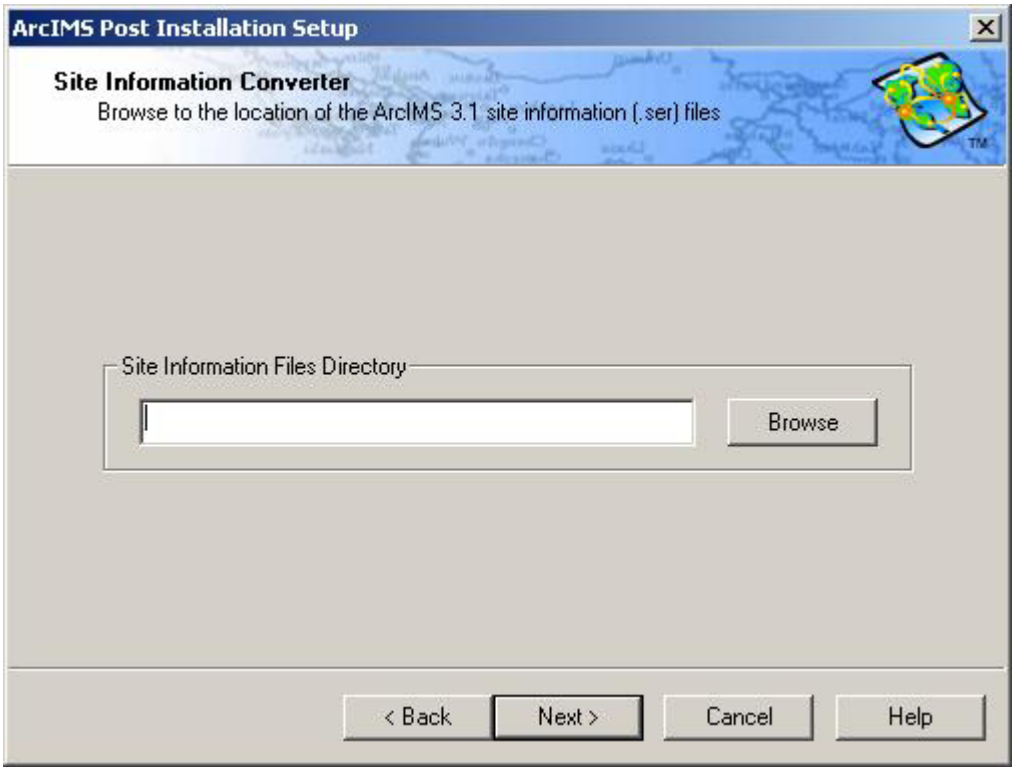
Note: Microsoft's Java Virtual Machine 3186 or later is required for the ArcIMS Monitor Windows Service. The installation updates your system if Java Virtual Machine is not detected or if you have an earlier version.

You need to configure your Web server to use ArcIMS Service Administrator. The ArcIMS Service Administrator presents a unified interface for managing ArcIMS and ArcSDE. If you want to use the ArcIMS Service Administrator to remotely administer ArcSDE Services, you must configure your Web Server. See Installing ArcSDE Services Monitor, Step 3 (Configure your Web server for ArcIMS Service Administrator), for options on configuring your Web server for ArcIMS Service Administrator.

ArcIMS Site Information Converter

The Site Information Converter can be used to convert existing ArcIMS 3.1 Site Information for use with ArcIMS 4.0.1. The serialized EsrimapCatalog.ser and EsrimapCookies.ser files will be replaced by ArcIMSSite.sez and ArcIMSFolders.sez, respectively.

1. **Browse to the location of your ArcIMS 3.1 site information (.ser files).**



The ArcIMS 3.1 EsrimapCatalog.ser file is the ArcIMS site configuration file that stores the information about the servers that are started and the services that are running. The ArcIMS 3.1 EsrimapCookies.ser file contains ArcIMS folders such as MapNotes and EditNotes. Starting at ArcIMS 4.0, these files have been replaced by ArcIMSSite.sez and ArcIMSFolders.sez, respectively. Before uninstalling ArcIMS 3.1, it is recommended that you back up your ArcIMS EsrimapCatalog.ser and EsrimapCookies.ser files.

The ArcIMS 4.0.1 post installation setup will prompt you for the location of the EsrimapCatalog.ser and EsrimapCookies.ser files and will convert them to ArcIMSSite.sez and ArcIMSfolders.sez files. The newly created *.sez files will contain ArcIMS 3.1 site information that can be used by the ArcIMS 4.0.1 Application Server. Note that the existing EsrimapCatalog.ser and EsrimapCookies.ser files will not be deleted.

If you choose not to convert the files at this time, you can select this option of the post installation setup at a later time from Start > Program Files > ArcGIS > ArcIMS > ArcIMS Post installation.

To manually convert the *.ser files using the SerConverter utility

If you choose not to convert the *.ser files in the post installation setup, you can manually convert *.ser files using the SerConverter utility. This utility is installed in a typical installation of ArcIMS and whenever ArcIMS Application Server or ArcIMS Spatial Server are installed. To use the SerConverter utility:

1. On Windows NT, click Start > Settings > Control Panel > Services.

   On Windows 2000, click Start > Settings > Control Panel > Administrative Tools > Component Services and click Services on the Tree tab.

On Windows XP, click Start > Control Panel > Performance and Maintenance > Administrative Tools > Component Services and click Services on the Tree tab.

2. Stop ArcIMS Tasker, ArcIMS Monitor, and ArcIMS Application Server.
3. Navigate to <ArcIMS Installation Directory>\ArcIMS\Middleware\SerConverter. Edit the SerConverter.properties file.
4. In a text editor, open the SerConverter.properties file and, if necessary, change the line workingDirectory=C:/Program Files/ArcGIS/ArcIMS/Middleware/SerConverter to the full path of your ArcIMS 4.0.1 SerConverter folder.
5. Change the line inputDirectory=C:/Program Files/ESRI/ArcIMS3.1/AppServer to the full path of the location of your ArcIMS 3.1 EsrimapCatalog.ser and EsrimapCookies.ser files.
6. If necessary, change the line outputDirectory=C:/Program Files/ArcGIS/ArcIMS/AppServer to the full path of the location of your ArcIMS 4.0.1 AppServer folder.
7. Save and close the file.
8. Open a command prompt and issue the command: `SerConverter SerConverter.properties` to start the conversion.

   The EsrimapCatalog.ser and EsrimapCookies.ser files will be converted to new files called ArcIMSSite.sez and ArcIMSFolders.sez located in <ArcIMS Installation Directory>\ArcIMS\AppServer.
9. Start ArcIMS Application Server, ArcIMS Monitor, and ArcIMS Tasker and close the Services window.

Note: New virtual servers in ArcIMS 4.0.1 (Metadata Server and ArcGIS ArcMap Server) will not show up in the converted ArcIMS site. The ArcIMS site is capable of running them; however, you need to manually create these two virtual servers and apply them to a new Spatial Server instance, then save the site configuration. See Using ArcIMS for details on creating virtual servers.

If you need to use the default 4.0.1 .sez files, delete the existing .sez files, and restart the ArcIMS Administrator service. The default ArcIMS 4.0.1 .sez files will be created at runtime.

Web Server-Servlet Engine Configuration

You must have a Web server and servlet engine installed and operational before you can configure them for ArcIMS. For information on setting up your Web server and servlet engine visit http://support.esri.com/search/KbDocument.asp?dbid=23450.

For supported Web servers and servlet engines, see Step 1: Verify system requirements. After you have installed your Web server and servlet engine you must verify that they are communicating with each other. To verify that your Web server and servlet engine are communicating, see Verifying your servlet engine. If your Web server and servlet engine do not appear to be successfully communicating with each other, see your servlet engine's Web site for further information.

Verify your servlet engine is working

After you have installed your Web server and servlet engine, you must verify that they are communicating with each other.

Open Internet Explorer and type the following:

For Sun ONE 6.0 (iplanet):

1. Copy SimpleServlet.class from <drive>:\iPlanet\Servers\plugins\samples\servlets\servlets\Simple1 to <drive>:\iPlanet\Servers\docs\servlet

   Note: You may need to create the \servlet directory.

2. Open your Web browser and type http://<local host>/servlet/SimpleServlet (case sensitive).

   If you can't ping Sun ONE 6.0 (iPlanet), on Windows NT, click Start > Settings > Control Panel > Services; on Windows 2000, click Start > Settings > Control Panel > Administrative Tools > Component Services and click Services on the Tree tab; on Windows XP, click Start > Control Panel > Performance and Maintenance > Administrative Tools > Component Services and click Services on the Tree tab. Stop your Sun ONE 6.0 (iPlanet) Web server.

3. Turn off the Sun ONE 6.0 (iPlanet) Java interpreter:

   a. In your Web browser, type http://<local host>:<serveradminport>. For example, http://esri:10000

   b. Type your user name and password and click OK at the bottom of the screen.

   c. Select your Server from the drop-down list and click Manage.

   d. Click the Java tab in the navigation bar along the top.

   e. At the Enable/Disable Java screen, uncheck Enable Java Globally and Enable Java for class defaultclass to deactivate the Java interpreter. Click OK.

   f. Now on Windows NT, click Start > Settings > Control Panel > Services; on Windows 2000, click Start > Settings > Control Panel > Administrative Tools > Component Services and click Services on the Tree tab; on Windows XP, click Start > Control Panel > Performance and Maintenance > Administrative Tools > Component Services and click Services on the Tree tab. Start your Sun ONE 6.0 (iPlanet) Web server. Then try the queries again.

   g. If successful, then repeat Steps a–e to reactivate the Java interpreter.

For JRun: http://<local host>/demo/servlets (case sensitive)

For Oracle Application Server: http://<local host>/servlets/IsItWorking

For ServletExec: http://<local host>/servlet/TestServlet (case sensitive)

For Tomcat: http://<local host>/examples/servlet/HelloWorldExample (case sensitive)

For Websphere: http://<local host>/servlet/HelloWorldServlet

If your Web server and servlet engine do not appear to be successfully communicating with each other, see your servlet engine's Web site for further information.

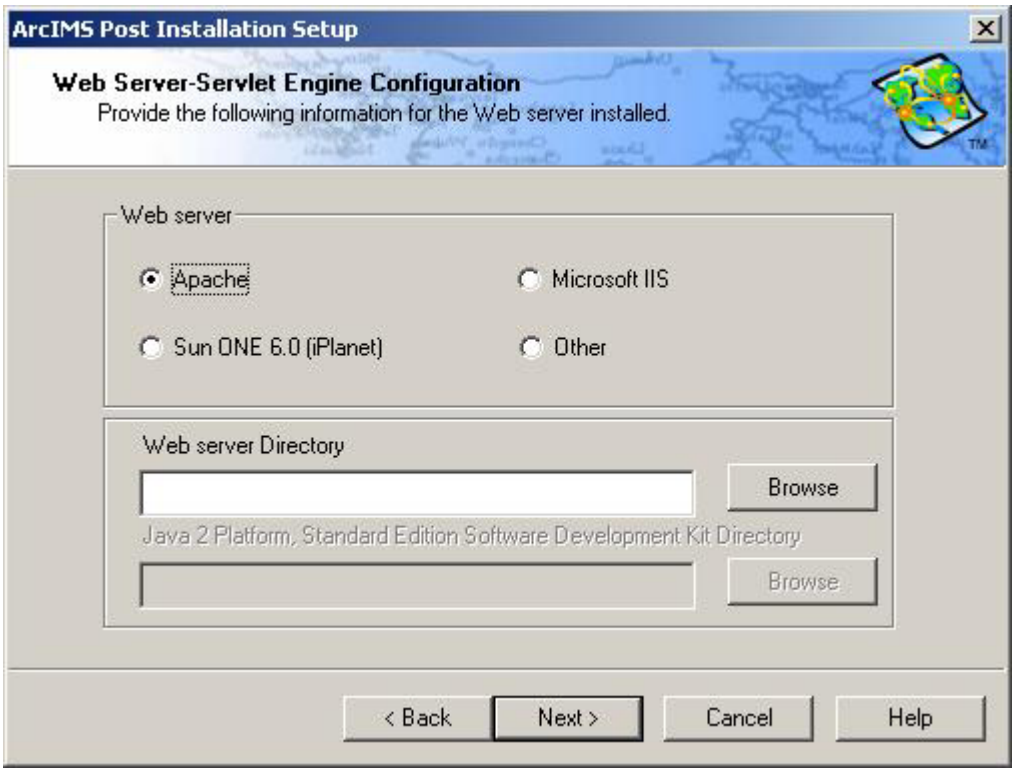
Web Server-Servlet Engine configuration

Automated Web server-Servlet Engine configuration is provided for the following:

- Tomcat for Apache
- ServletExec 4.1.1 for Apache
- Sun ONE 6.0 (iPlanet) Web Server (with its native Java servlet engine)
- Tomcat for IIS
- ServletExec 4.1.1 for IIS

You can run the post installation setup at any time from Start > Programs > ArcGIS > ArcIMS > ArcIMS Post installation.

1. **Select the Web server you installed.**



   Select the Web server you have installed on your machine.

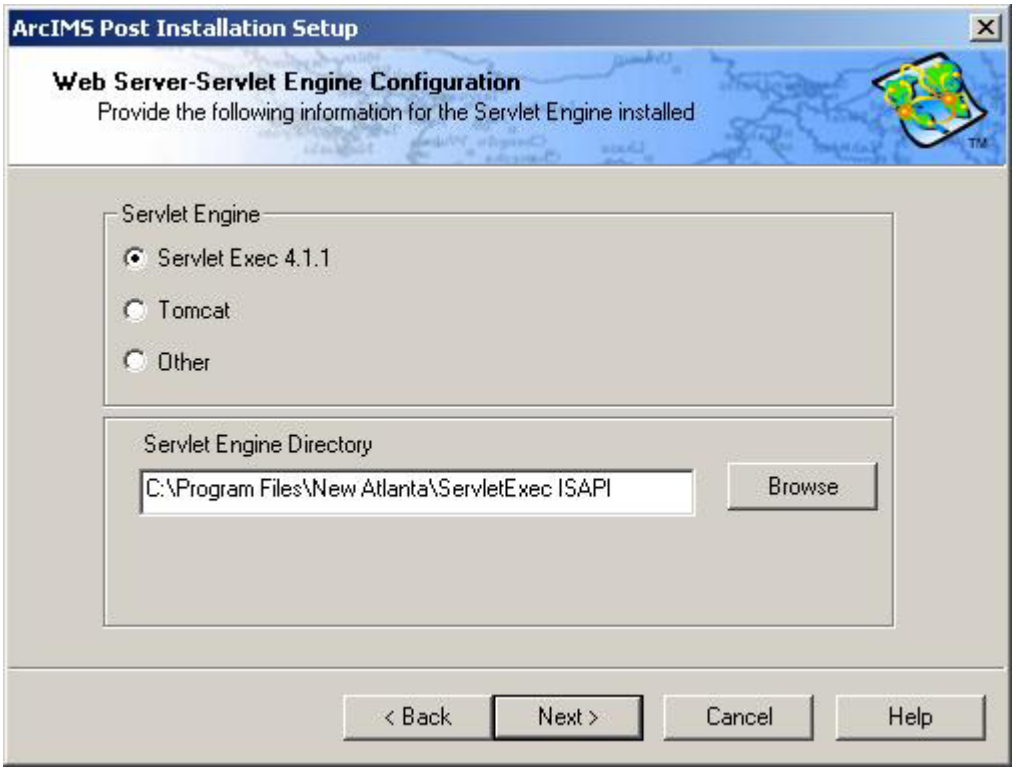
   Select Other if you are using a Web server that is not currently configured automatically. If you select Other, you will need to manually configure your Web server. See Step 4: Configure your Web server for details.

   For Sun ONE 6.0 (iPlanet) and Apache, you must provide the location of your Web server installation directory. Click Help on this dialog box for common Web Server installation locations.

   If you are configuring Sun ONE 6.0 (iPlanet), and you are using the Metadata Explorer or the ArcIMS Services Administrator, the location of your Java 2 Standard Edition Software Development Kit installation directory is also required. Click Help on this dialog box for common J2SE SDK directories.

2. **Select the servlet engine you installed.**

   Select the servlet engine you have installed on your machine.



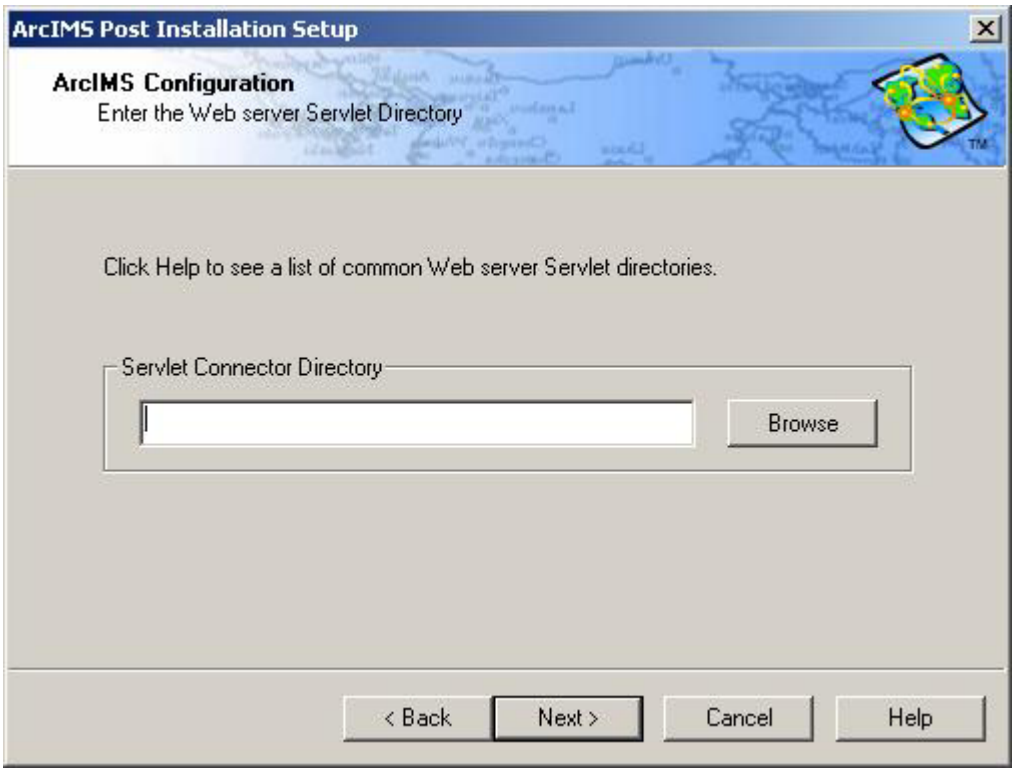
You must provide the servlet engine installation directory. Click Help on this dialog box for a list of common servlet engine installation directories. You do not have to provide servlet engine information if you are using Sun ONE 6.0 (iPlanet).

Select Other if you are using a servlet engine that is not currently configured automatically. If you select Other the ArcIMS Servlet Connector directory, \com, will be copied to your Web server servlets directory in order to establish communication between your Web server and the ArcIMS Application server. You will need to browse to the location of your Web server servlets directory, in the next dialog box, for the ArcIMS Servet Connector directory to be copied to that location. You must manually configure your Web server to successfully complete your ArcIMS installation. See Step 4: Configure your Web server for information on manually configuring your Web server and servlet engine.

If your Website and Output directories are on a different machine, you will also need to provide the location of these files. Click Help on this dialog box for the default ArcIMS installation location. If your Output and Website directories exist on a different machine, you must map a drive to that machine and browse to that machine location. Make sure the mapped drive is set to reconnect at login, as it will be reflected in virtual directory paths.

Note: After configuring Sun ONE 6.0 (iPlanet) and restarting the Web server services, the Sun ONE 6.0 (iPlanet) Web server administrator application indicates that there are manual changes that haven't been loaded yet. The changes to your Web server have been applied, but you will need to load them using the Sun ONE 6.0 (iPlanet) administrator application. Your Web server configuration is successful without manually loading the changes.

3. **Enter the Web server servlet connector directory.**



The ArcIMS Servlet Connector directory must be copied to your Web server servlet directory to establish communication between your Web server and the ArcIMS Application Server. The ArcIMS Servlet Connector directory will be copied to the Web Server Servlet Connector directory that you specify.

Use the Help button on this dialog box to view a list of common Web servers and their servlet directories. If you are unsure of the location of your Web server servlet directory, browse to <ArcIMS installation directory>\ArcIMS\Connectors\Servlet and contact your system administrator. In this case, the Servlet Connector (com directory and associated files) must be manually moved from <ArcIMS Installation Directory>\ArcIMS\Connectors\Servlet to the appropriate Web server directory before using ArcIMS. See Step 4: Configuring your Web server for details.

For manual Web server Servlet Engine configuration see Step 4: Configure your Web server for the following:

- Sun ONE 6.0 (iPlanet) (with its native Java servlet engine)
- JRun for IIS
- Oracle Application Server
- ServletExec for Apache
- ServletExec for IIS
- Tomcat for IIS
- Tomcat for Apache
- WebLogic
- WebSphere

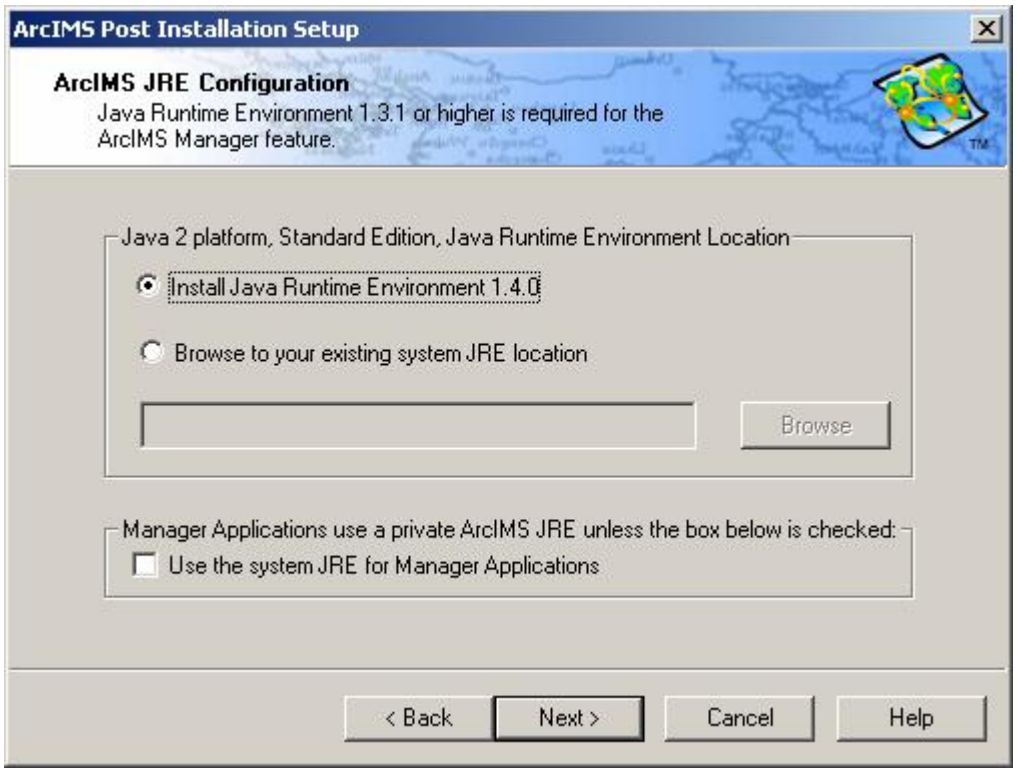
ArcIMS J2SE JRE configuration

ArcIMS Manager and Java Viewers require a system registered Java 2 Platform Standard Edition Java Runtime Environment version 1.3.1 or higher. J2SE JRE versions 1.3.1_02 and 1.4.0 are supported for use with ArcIMS 4.0.1. A J2SE JRE does not have to be installed prior to installing ArcIMS, the post installation setup will provide you with the opportunity to install and configure a registered J2SE JRE system version 1.4.0.

Note: J2SE JRE 1.3.1_03, 1.3.1_04, and J2SE JRE 1.4.0_01 are NOT recommended for use with ArcIMS 4.0.1.

Note: J2SE JRE is not needed if J2SE SDK 1.3.1 or higher is installed on the computer.

1. **Configure J2SE JRE system**



The Manager Applications (Designer, Author, and Administrator), by default, will use J2SE JRE files installed in the ArcIMS installation location. These installed J2SE JRE files are not system-registered and cannot be used for ArcIMS Manager or the Java Viewers. Check the box provided on this dialog box to apply your system J2SE JRE to the Manager Applications also.

ArcMap Server configuration

Specify an ArcGIS license manager

ArcIMS ArcMap Server requires an ArcGIS License Manager. You can install the License Manager locally during this post installation setup option or use an existing License Manager on your network. A network license manager can be running on Microsoft Windows or UNIX. If you choose a license manager on the network, it must contain an ArcMap Server feature (keycode).

For more information on the ArcGIS License Manager, see the License Manager Reference Guide, LicenseManagerGuide.html, located in the documentation folder on the ArcIMS CD.

If you do not have an operational License Manager on the network, you will need to install an ArcGIS License Manager.

You can change the License Manager at any time by running through this post installation option again from Start > Program Files > ArcGIS > ArcIMS > ArcIMS Post installation.

Installing the license manager

ArcIMS ArcMap Server requires an ArcGIS License Manager. The same license manager can be used for other ESRI software products such as ArcInfo Workstation and ArcGIS Desktop.

Note: ArcIMS and ArcGIS licenses can be served from either a Windows or UNIX License Manager. For example, a Windows installation of ArcIMS ArcMap Server can obtain a license from either a Windows or UNIX 8.x License Manager. For more information on sharing licenses across platforms, see the License Manager Reference Guide, LicenseManagerGuide.htm, available in the documentation folder on the ArcIMS CD. After installing the License Manager, this guide is also available at Start > Programs > ArcGIS > License Manager > License Manager Reference Guide or in the installation folder, typically \Program Files\ESRI\License\Documentation\
LicenseManagerGuide.htm.

The License Manager can be installed on a machine where ArcMap Server will be run or on a machine where only the License Manager will be installed. Other ArcGIS installations can point to that license manager during the installation process.

1. **Verify License Manager requirements**

   FLEXlm communicates through TCP/IP, which must be installed and functioning properly on any Windows or UNIX license server. TCP/IP requires either a network card along with its drivers or the Microsoft Loopback Adapter on your Windows workstation.

   ### Checking for TCP/IP

   Microsoft Windows NT

   Click Start > Settings > Control Panel, double-click Network, and select the Protocols tab. There should be a listing for TCP/IP.

   Microsoft Windows 2000

   Click Start > Settings > Control Panel, double-click Network and Dial-up connections, double-click Local Area Connection, and click Properties. There should be a listing for TCP/IP.

   Microsoft Windows XP

   Click Start > Control Panel, double-click Network and Internet Connections, single-click Network Connections, double-click Local Area Connection, and click Properties. There should be a listing for TCP/IP.

   ### Checking for a network card or Microsoft Loopback adapter

   Microsoft Windows NT

   Click Start > Settings > Control Panel, double-click Network, and select the Adapters tab.

   Microsoft Windows 2000

   Click Start > Settings > Control Panel, double-click System, choose the Hardware tab, click the Device Manager button, and expand Network Adapters.

   Microsoft Windows XP

   Click Start > Control Panel, double-click Performance and Maintenance, single-click System, select the Hardware tab, click Device Manager, and expand Network Adapters.

Setting up the Microsoft Loopback adapter

Microsoft Windows NT

Click Start > Settings > Control Panel. Double-click Network. Select Adapters. Click Add and select MS Loopback Adapter from the Network Adapter List. Click Have Disk and put your Windows NT CD into your CD drive and type in the correct drive letter.

Microsoft Windows 2000

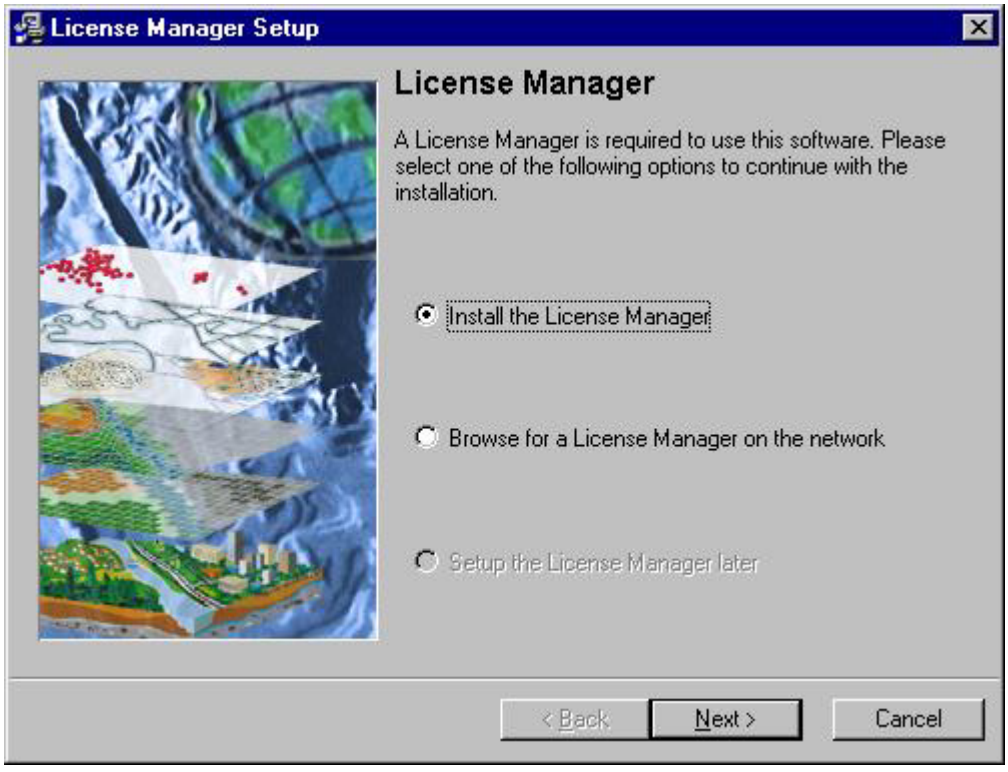
Click Start > Settings > Control Panel. Double-click Add/Remove Hardware. Click Add/Troubleshoot a device, and click Next. Click Add a new device and click Next. Click No, I want to select the hardware from a list, and click Next. Click Network Adapters and click Next. In the Manufacturer's box, select Microsoft. In the Network Adapter box, click Microsoft Loopback Adapter. Click Finish.

Microsoft Windows XP

Click Start > Control Panel > Printers and Other Hardware. Click Add Hardware and click Next. Select "Yes, I have already connected the hardware" and click Next. Select Add a new hardware device, and click Next. Select Search for and install the hardware automatically, and click Next. Select Network Adapters and click Next. In the Manufacturer box select Microsoft. In the Network Adapter box, click Microsoft Loopback Adapter and click Next. Click Next and Finish.

2. Install License manager

In the ArcMap Server post installation setup select Install the License Manager.



During the license manager installation you will be prompted for the location of your license file. This refers to the license file you received from ESRI customer service. Once you have completed the license manager installation, you can supply the license manager information to those users installing ArcIMS ArcMap Server. They can browse to this network license manager when prompted for the license manager machine during their installation.

Step 4: Configure your Web server

You must have a Web server and servlet engine installed and operational before they can be configured for ArcIMS. For information on setting up your Web server and servlet engine visit http://support.esri.com/search/KbDocument.asp?dbid=23450. For supported Web servers and servlet engines, See Step 1: Verify system requirements. After you have installed your Web server and servlet engine, you must verify that they are communicating with each other. To verify that your Web server and servlet engine are communicating see Verifying your servlet engine. If your Web server and servlet engine do not appear to be successfully communicating with each other, see your servlet engine's Web site for further information.

Verifying your servlet engine

After you have installed your Web server and servlet engine, you must verify that they are communicating with each other.

Open Internet Explorer and type the following:

For Sun ONE 6.0 (iplanet):

1. Copy SimpleServlet.class from <drive>:\iPlanet\Servers\plugins\samples\servlets\servlets\Simple1 to <drive>:\iPlanet\Servers\docs\servlet

   Note: You may need to create the \servlet directory.

2. Open your Web browser and type http://<local host>/servlet/SimpleServlet (case sensitive).

   If you can't ping Sun ONE 6.0 (iPlanet), on Windows NT, click Start > Settings > Control Panel > Services; on Windows 2000, click Start > Settings > Control Panel > Administrative Tools > Component Services and click Services on the Tree tab; on Windows XP, click Start > Control Panel > Performance and Maintenance > Administrative Tools > Component Services and click Services on the Tree tab. Stop your Sun ONE 6.0 (iPlanet) Web server.

3. Turn off the Sun ONE 6.0 (iPlanet) Java interpreter:

   a. In your Web browser, type http://<local host>:<serveradminport>. For example, http://esri:10000

   b. Type your user name and password and click OK at the bottom of the screen.

   c. Select your server from the drop-down list and click Manage.

   d. Click the Java tab in the navigation bar along the top.

   e. At the Enable/Disable Java screen, uncheck Enable Java Globally and Enable Java for class defaultclass to deactivate the Java interpreter. Click OK.

   f. Now on Windows NT, click Start > Settings > Control Panel > Services; on Windows 2000, click Start > Settings > Control Panel > Administrative Tools > Component Services and click Services on the Tree tab; on Windows XP, click Start > Control Panel > Performance and Maintenance > Administrative Tools > Component Services and click Services on the Tree tab. Start your Sun ONE 6.0 (iPlanet) Web server. Then try the queries again.

   g. If successful, repeat Steps a–e to reactivate the Java interpreter.

For JRun: http://<local host>/demo/servlets (case sensitive)

For Oracle Application Server: http://<local host>/servlets/IsItWorking

For ServletExec: http://<local host>/servlet/TestServlet (case sensitive)

For Tomcat: http://<local host>/examples/servlet/HelloWorldExample (case sensitive)

For Websphere: http://<local host>/servlet/HelloWorldServlet

If your Web server and servlet engine do not appear to be successfully communicating with each other, see your servlet engine's Web site for further information.

Configuring your Web server

Your Web server and servlet engine can be configured automatically using the post installation setup, or they can be configured manually.

To automatically configure your Web server and servlet engine use the post installation setup. You can run the post installation setup at any time from Start > Programs > ArcGIS > ArcIMS > ArcIMS post installation. See the Web Server-Servlet Engine Configuration option for information on the following automated Web server Servlet Engine configurations:

- Tomcat for Apache
- ServletExec 4.1.1 for Apache
- Sun ONE 6.0 (iPlanet) Web Server (with its native Java servlet engine)
- Tomcat for IIS
- ServletExec 4.1.1 for IIS

If you have Manager or Metadata Explorer installed, the post installation setup will also configure your Web server to work with the ArcIMS Services Administrator and the Metadata Explorer.

To manually configure your Web server and servlet engine for ArcIMS use the following steps provided for these Web server–servlet engine configurations:

- Configuring Sun ONE 6.0 (iPlanet)
- Configuring JRun for IIS
- Configuring Oracle Application Server
- Configuring ServletExec for Apache
- Configuring ServletExec for IIS
- Configuring Tomcat for IIS
- Configuring Tomcat for Apache
- Configuring WebLogic
- Configuring WebSphere

If you manually configured your Web server and servlet engine, and you will be using Metadata Explorer or the ArcIMS Services Administrator, you will also need to manually configure your Web server for use with these features using the additional steps for your chosen Web server.

Configuring Sun ONE 6.0 (iPlanet)

After installing ArcIMS, you must configure your Web server for ArcIMS. If your Web server is not operational, contact your system administrator before you proceed. See www.sun.com/software for information on problems with Sun ONE 6.0 (iPlanet).

1. Verify that the following items are at \iPlanet\Servers\docs\servlet:
    - com directory
    - Esrimap_prop
    - ServletConnector_Res.properties
    - ServletConnector_Res_en_US.properties files
    - WMSEsrimap_prop

If you cannot verify the above then

- On Windows NT, click Start > Settings > Control Panel > Services; On Windows 2000, click Start > Settings > Control Panel > Administrative Tools > Component Services, and click Services on the Tree tab; on Windows XP, click Start > Control Panel > Performance and Maintenance > Administrative Tools > Component Services, and click Services on the Tree tab.
- Stop Sun ONE 6.0 (iPlanet) Web server
- Navigate to <ArcIMS Installation Directory>\ArcIMS\Connectors\Servlet, and copy the items to that location.
- Start Sun ONE 6.0 (iPlanet) Web server.

Setting up your Web server for ArcIMS

1. In your Web browser, type:

   `http://<local host>:<serveradminport>`

   For example: http://esri:10000

   Note: You may need to include your domain: `http://<local host.domain.com>:<serveradminport>`

   For example: http://esri.esri.com:10000

   Note: If you don't know your server's administration port, open iPlanet\Servers\https-admserv\config\admin.conf in a text editor and read the port there.
2. Type your user name and password and click OK. The Sun ONE 6.0 (iPlanet) Web Server Administration Server screen displays.
3. Select your server from the drop-down list and click Manage. The Server On/Off screen displays. Make sure the server is on.
4. Click the Java tab along the top.
5. The Enable/Disable Java screen displays. Make sure the Enable Java Globally and Enable Java for class defaultclass options are checked. Click OK.
6. Click Class Manager in the upper right corner of the screen. The Manage Virtual Servers screen displays.
7. Click Content Mgmt in the navigation bar on the top. The Document Root Settings screen displays.
8. Click Document Preferences on the left sidebar. The Document Preferences screen displays.
9. Add the following first in the list under Index Filenames:

   `default.htm,default.html,index.htm,`

   Click OK. Click Apply in the upper right corner.
10. Click Apply Changes to restart your Web server.
11. Exit Sun ONE 6.0 (iPlanet).

Creating virtual directories

After installing ArcIMS, you must create virtual directories for Output, Website, and Manager. A virtual directory is a mapped location on the Web server to a physical path.

Note: If you browsed to \iPlanet\Servers\docs to create directories for Output and Website (the Website Working Directories) during ArcIMS installation, you don't need to create virtual directories for Output and Website. Exit Sun ONE 6.0 (iPlanet) and skip to Using the Diagnostics tool to test your ArcIMS installation.

12. Navigate to <Sun ONE 6.0 (iPlanet) Installation Directory>\https-<local host>.<domain>.com\config directory and open the obj.conf file in a text editor.
13. After the <Object name=default> tag add the following lines:

    For Manager-

    NameTrans fn=pfx2dir from="/Manager" dir="<ArcIMS Installation Directory>/ArcIMS/Manager"

    For Output-

    NameTrans fn=pfx2dir from="/Output" dir="<Website and Output Installation Directory>/Output"

    For Website-

    NameTrans fn=pfx2dir from="/Website" dir="<Website and Output Installation Directory>/Website"
14. Save and close the file
15. Stop and Start the Sun ONE 6.0 (iPlanet) Web server.

Using the Diagnostics tool to test your ArcIMS installation

16. Click Start > Programs > ArcGIS > ArcIMS > Diagnostics. The ArcIMS Diagnostics tool displays.
17. Select your Web server protocol, type your Web server name including domain, and type your port number. The default is 80.
18. Click 1 to test the ArcIMS Servlet Connector and 2 to test the ArcIMS Application Server.

    If these tests are successful, your ArcIMS Application Server and ArcIMS Servlet Connector are configured correctly.

    If you receive an error message, select the error number in the drop-down list and click View. The error number and a description display. Follow the instructions in the description to fix the problem and try the Diagnostics tool again.

See WMS for information on configuring for WMS.

See Configuring Sun ONE 6.0 (iPlanet) for Service Administrator for information on configuring ArcIMS Service Administrator.

See Configuring Sun ONE 6.0 (iPlanet) for Metadata Explorer for information on configuring Metadata Explorer.

See Step 5: Configure ArcIMS for the final step required to get ArcIMS running.

Configuring JRun for IIS

After installing ArcIMS, you must configure your IIS Web server for ArcIMS. If your Web server and servlet engine are not operational, contact your system administrator before you proceed. See www.livesoftware.com/products/jrun for information on problems with JRun.

1. Verify that the following items are at \Program Files\Allaire\Jrun\servlets:

   - com directory
   - Esrimap_prop
   - ServletConnector_Res.properties
   - ServletConnector_Res_en_US.properties files
   - WMSEsrimap_prop

   If not, on Windows NT click Start > Settings > Control Panel > Services; on Windows 2000, click Start > Settings > Control Panel > Administrative Tools > Component Services and click Services on the Tree tab; on Windows XP, click Start > Control Panel > Performance and Maintenance > Administrative Tools > Component Services and click Services on the Tree tab.

   In the left panel, highlight Default Web Site, then in the toolbar, click the square to stop IIS. Then navigate to <ArcIMS Installation Directory>\ArcIMS\Connectors\Servlet and copy the items to that location.

   Click the arrow in the IIS Manager toolbar to restart IIS.

   On Windows NT, click Start > Settings > Control Panel > Services; on Windows 2000, click Start > Settings > Control Panel > Administrative Tools > Component Services and click Services on the Tree tab; on Windows XP, click Start > Control Panel > Performance and Maintenance > Administrative Tools > Component Services and click Services on the Tree tab.

   Stop and start JRun Admin Server and JRun Default Server and close the Services window.

Using the Diagnostics tool to test your ArcIMS installation

2. Click Start > Programs > ArcGIS > ArcIMS > ArcIMS Diagnostics. The ArcIMS Diagnostics tool displays.
3. Select your Web server protocol, type your Web server name including domain, and type your port number. The default is 80.
4. Click 1 to test the ArcIMS Servlet Connector and 2 to test the ArcIMS Application Server.

   If these tests are successful, your ArcIMS Application Server and ArcIMS Servlet Connector are configured correctly.

   If you receive an error message, select the error number in the drop-down list and click View. The error number and a description display. Follow the instructions in the description to fix the problem and try the Diagnostics tool again.
5. Continue creating virtual directories on IIS.

See WMS for information on configuring WMS.

See Configuring JRun for Service Administrator for information on configuring ArcIMS Service Administrator.

See Configuring JRun for Metadata Explorer for information on configuring Metadata Explorer.

Creating virtual directories on IIS

After installing ArcIMS, you must create virtual directories for Manager, Output, and Website. A virtual directory is a mapped location on the Web server to a physical path.

Note: If you browsed to the location of your Web server root directory to create directories for Output and Website during ArcIMS post installation setup, you don't need to create virtual directories for Output and Website.

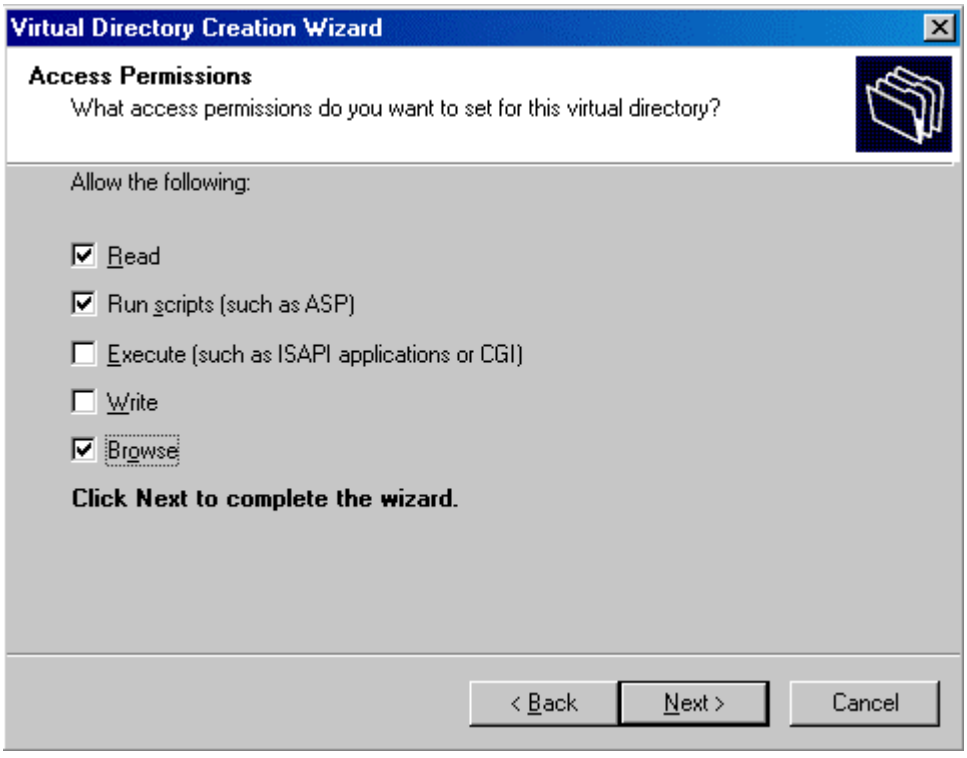
1. For IIS 4.0, click Start > Programs > Windows NT Option Pack > Microsoft Internet Information Server > Internet Service Manager. Expand your local host name.

   For IIS 5.0, click Start > Settings > Control Panel > Administrative Tools > Internet Services Manager. Expand your local host name.

   For IIS 5.1, click Start > Internet Information Services. Expand your local host folder and expand Web Sites.
2. Click Default Web Site to highlight it.
3. Click Action in the toolbar.
4. From the drop-down menu, point to New and click Virtual Directory. The Virtual Directory Creation Wizard displays. Click Next.
5. Type the following for the alias: Manager

   Click Next.
6. Click Browse to select the ArcIMS Manager directory at <ArcIMS Installation Directory>\ArcIMS\Manager, and click Next.
7. For IIS 4.0, check Allow Directory Browsing and click Finish.

   For IIS 5.0 and IIS 5.1, check Browse and click Next. Click Finish.



Manager appears in the virtual directory list.

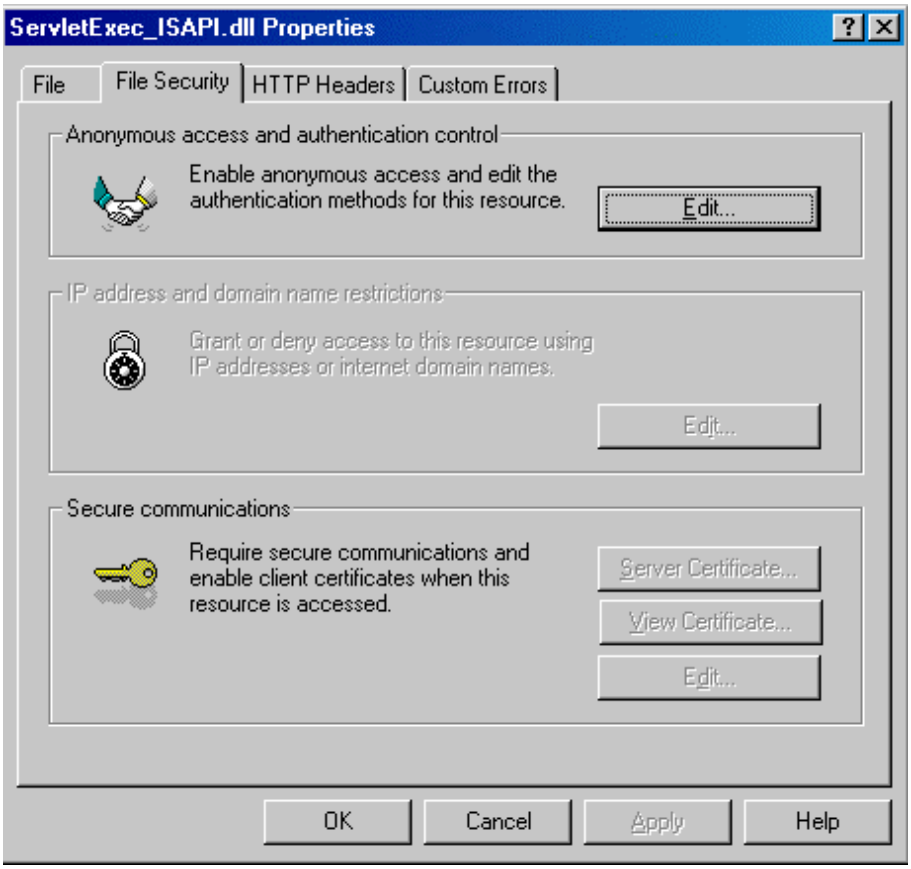
Now create virtual directories for Output and Website.

Note: If you browsed to the location of your Web server root directory to create directories for Output and Website during ArcIMS installation, skip to Step 18.

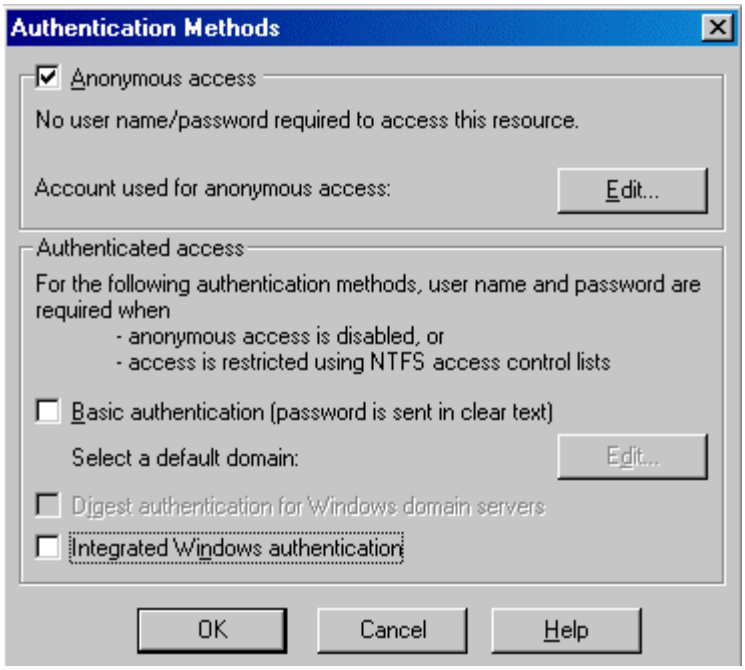
8. Click Default Web Site to highlight it.
9. Click Action, point to New, and click Virtual Directory.
10. Type the following for the alias: output

    Click Next.
11. Click Browse to select the ArcIMS output directory located where you placed it during installation, for example, C:\ArcIMS\output. Click Next.
12. Check Allow Directory Browsing or Browse, click Next, and click Finish. Output appears in the virtual directory list.
13. Click Default Web Site to highlight it.
14. Click Action, point to New, and click Virtual Directory.
15. Type the following for the alias: Website

    Click Next.
16. Click Browse to select the ArcIMS Website directory located where you placed it during installation, for example, C:\ArcIMS\Website. Click Next.
17. Check Allow Directory Browsing or Browse and click Finish. Website appears in the virtual directory list.
18. Change file security for your servlet engine:
    a. In the left panel, click Scripts for JRun. In the right panel, right-click jrun.dll for JRun and select Properties.
    b. In the left panel, click Scripts for ServletExec. In the right panel, right-click ServletExec_ISAPI.dll and select Properties.
    c. In the left panel, click jakarta for Tomcat. In the right panel, right-click isapi_redirector.dll for Tomcat and select Properties.
19. Click the File Security tab and click Edit to change the Anonymous access and authentication control.



20. Make sure Anonymous access is checked. For IIS 4.0, uncheck Windows NT Challenge/Response and click OK; for IIS 5.0 and 5.1, uncheck Integrated Windows Authentication and click OK.



21. Click OK on the properties window.
22. Close the console window. If prompted to save console settings, click Yes.

Configuring Oracle Application Server

After installing ArcIMS, you must configure your Web server for ArcIMS. If your Web server and servlet engine are not operational, contact your system administrator before you proceed. See www.oracle.com for information on problems with Oracle Application Server (OAS).

1. Verify that the following items are at \Oracle\iSuites\Apache\Jserv\servlets:
   - com directory
   - Esrimap_prop
   - ServletConnector_Res.properties
   - ServletConnector_Res_en_US.properties files
   - WMSEsrimap_prop

   If not, on Windows NT click Start > Settings > Control Panel > Services; on Windows 2000, click Start > Settings > Control Panel > Administrative Tools > Component Services and click Services on the Tree tab; on Windows XP, click Start > Control Panel > Performance and Maintenance > Administrative Tools > Component Services and click Services on the Tree tab.

   Stop your Oracle Application Server, navigate to <ArcIMS Installation Directory>\ArcIMS\Connectors\Servlet, and copy the items to that location.

   Start your Oracle Application Server.
2. In a text editor, open \Oracle\iSuites\Apache\Apache\conf\httpd.conf
3. Find the line: `DirectoryIndex index.html`
4. Add default.htm to the end of the line. The line should now read:

   DirectoryIndex index.htm default.htm
5. Save and close the file.
6. Stop and Start your Oracle Application Server.

Creating virtual directories

After installing ArcIMS, you must create virtual directories for Manager, Output, and Website. A virtual directory is a mapped location on the Web server to a physical path.

Note: If you browsed to the location of your Web server root directory to create directories for Output and Website (the Website Working Directories) during ArcIMS installation, you don't need to create virtual directories for Output and Website.

7. On Windows NT, click Start > Settings > Control Panel > Services; on Windows 2000, click Start > Settings > Control Panel > Administrative Tools > Component Services and click Services on the Tree tab.
8. Stop your Oracle HTTPS Server.
9. In a text editor, open <ArcIMS Installation Directory>\ArcIMS\Common\ApacheAlias.txt and copy the contents of the file.
10. In a text editor, open \Oracle\iSuites\Apache\Apache\conf\httpd.conf.

    Under the line

    ```
    Alias /icons/"<drive>:\Oracle\iSuites\Apache\Apache\icons/"
    ```

paste the lines from the ApacheAlias.txt file that follow this pattern. Replace the paths in these lines with the appropriate paths where necessary.

11. Save and close the file.
12. Start your Oracle HTTPS Server and close the services window.

Using the Diagnostics tool to test your ArcIMS installation

13. Click Start > Programs > ArcGIS > ArcIMS > ArcIMS Diagnostics. The ArcIMS Diagnostics tool displays.
14. Select your Web server protocol, type your Web server name including domain, and type your port number. The default is 80.
15. Click 1 to test the ArcIMS Servlet Connector and 2 to test the ArcIMS Application Server.

    If these tests are successful, your ArcIMS Application Server and ArcIMS Servlet Connector are configured correctly.

    If you receive an error message, select the error number in the drop-down list and click View. The error number and a description display. Follow the instructions in the description to fix the problem and try the Diagnostics tool again.

See WMS for information on configuring WMS.

See Configuring Oracle Application Server for Service Administrator for information on configuring ArcIMS Service Administrator.

See Configuring Oracle Application Server for Metadata Explorer for information on configuring Metadata Explorer.

See Step 5: Configure ArcIMS for the final step required to get ArcIMS running.

Configuring ServletExec for Apache Web Server

After installing ArcIMS, you must configure your Web server for ArcIMS. If your Web server and servlet engine are not operational, contact your system administrator before you proceed. See www.newatlanta.com for information on problems with ServletExec.

1. Verify that the following items are at \Program Files\New Atlanta\ServletExec AS\se-<instance-name>\Servlets:

   - com directory
   - Esrimap_prop
   - ServletConnector_Res.properties
   - ServletConnector_Res_en_US.properties files
   - WMSEsrimap_prop

   If not, on Windows NT click Start > Settings > Control Panel > Services; on Windows 2000, click Start > Settings > Control Panel > Administrative Tools > Component Services and click Services on the Tree tab; on Windows XP, click Start > Control Panel > Performance and Maintenance > Administrative Tools > Component Services and click Services on the Tree tab.

   Stop the Apache and Servlet Exec services. Then navigate to <ArcIMS Installation Directory>\ArcIMS\Connectors\Servlet and copy the items to that location.

   Start the Apache and ServletExec services.

Creating virtual directories

After installing ArcIMS, you must create virtual directories for Manager, Output, and Website. A virtual directory is a mapped location on the Web server to a physical path.

Note: If you browsed to the location of your Web server root directory to create directories for Output and Website (the Website Working Directories) during ArcIMS installation, you don't need to create virtual directories for Output and Website.

2. On Windows NT, click Start > Settings > Control Panel > Services; on Windows 2000, click Start > Settings > Control Panel > Administrative Tools > Component Services and click Services on the Tree tab; on Windows XP, click Start > Control Panel > Performance and Maintenance > Administrative Tools > Component Services and click Services on the Tree tab.
3. Stop your Apache Web server.
4. In a text editor, open <ArcIMS Installation Directory>\ArcIMS\Common\ApacheAlias.txt and copy the contents of the file. Close the file.
5. In a text editor, open \<Apache_Home>\conf\httpd.conf. Under the line

   ```
   Alias /icons/ "<drive>:/Program Files/Apache Group/Apache/icons/"
   ```

   paste the lines from the ApacheAlias.txt file. Replace the paths in these lines with the appropriate paths where necessary.
6. Save and close the file.
7. Start your Apache Web Server and close the Services window.

Using the Diagnostics tool to test your ArcIMS installation

8. Click Start > Programs > ArcGIS > ArcIMS > ArcIMS Diagnostics. The ArcIMS Diagnostics tool displays.

9. Select your Web server protocol, type your Web server name including domain, and type your port number. The default is 80.
10. Click 1 to test the ArcIMS Servlet Connector and 2 to test the ArcIMS Application Server.

    If these tests are successful, your ArcIMS Application Server and ArcIMS Servlet Connector are configured correctly.

    If you receive an error message, select the error number in the drop-down list and click View. The error number and a description display. Follow the instructions in the description to fix the problem and try the Diagnostics tool again.

See WMS for information on configuring WMS.

See Configuring ServletExec for Service Administrator for information on configuring ArcIMS Service Administrator.

See Configuring ServletExec for Metadata Explorer for information on configuring Metadata Explorer.

See Step 5: Configure ArcIMS for the final step required to get ArcIMS running.

Configuring ServletExec for IIS

After installing ArcIMS, you must configure your IIS Web server for ArcIMS. If your Web server and servlet engine are not operational, contact your system administrator before you proceed. See the New Atlanta Web site at http://www.newatlanta.com/partners/esri/faq.jsp for information on problems with ServletExec.

1. Verify that the following items are at \Program Files\New Atlanta\ServletExec ISAPI\Servlets:

   - com directory
   - Esrimap_prop
   - ServletConnector_Res.properties
   - ServletConnector_Res_en_US.properties files
   - WMSEsrimap_prop

   If not, on Windows NT click Start > Settings > Control Panel > Services; on Windows 2000, click Start > Settings > Control Panel > Administrative Tools > Component Services and click Services on the Tree tab; on Windows XP, click Start > Control Panel > Performance and Maintenance > Administrative Tools > Component Services and click Services on the Tree tab.

   Stop IIS Admin Service and World Wide Web Publishing Service. Then navigate to <ArcIMS Installation Directory>\ArcIMS\Connectors\Servlet and copy the items to that location. Start IIS Admin Service and World Wide Web Publishing Service and close the Services Window.

2. Provide read/write access to the ServletExec Data directory:

   a. Browse to the ServletExec ISAPI directory in the ServletExec installation folder, for example, \Program Files\New Atlanta.

   b. Right-click the ServletExec ISAPI directory and select Properties.

   c. Click the Security tab.

   d. Click Add.

   e. In the Look in drop-down list, choose your computer name.

   f. Double-click IUSR_<computer name> and click OK.

   g. Highlight the user, Internet Guest Account (<computer name>\IUSR_<computer name>).

   h. For Write access, select Allow, and click OK.

3. On Windows NT, click Start > Settings > Control Panel > Services; On Windows 2000, click Start > Settings > Control Panel > Administrative Tools > Component Services, and click Services in the Tree tab; On Windows XP, click Start > Control Panel > Performance and Maintenance > Administrative Tools > Component Services, and click Services on the Tree tab.

   Stop and Start IIS Admin Service and World Wide Web Publishing Service, then close the Services window.

Using the Diagnostics tool to test your ArcIMS installation

1. Click Start > Programs > ArcGIS > ArcIMS > ArcIMS Diagnostics. The ArcIMS Diagnostics tool displays.
2. Select your Web server protocol, type your Web server name including domain, and type your port number. The default is 80.
3. Click 1 to test the ArcIMS Servlet Connector and 2 to test the ArcIMS Application Server.

   If these tests are successful, your ArcIMS Application Server and ArcIMS Servlet Connector are configured correctly.

If you receive an error message, select the error number in the drop-down list and click View. The error number and a description display. Follow the instructions in the description to fix the problem and try the Diagnostics tool again.

4. Continue creating virtual directories on IIS.

See WMS for information on configuring WMS.

See Configuring ServletExec for Service Administrator for information on configuring ArcIMS Service Administrator.

See Configuring ServletExec for Metadata Explorer for information on configuring Metadata Explorer.

Creating virtual directories on IIS

After installing ArcIMS, you must create virtual directories for Manager, Output, and Website. A virtual directory is a mapped location on the Web server to a physical path.

Note: If you browsed to the location of your Web server root directory to create directories for Output and Website during ArcIMS post installation setup, you don't need to create virtual directories for Output and Website.

1. For IIS 4.0, click Start > Programs > Windows NT Option Pack > Microsoft Internet Information Server > Internet Service Manager. Expand your local host name.

   For IIS 5.0, click Start > Settings > Control Panel > Administrative Tools > Internet Services Manager. Expand your local host name.

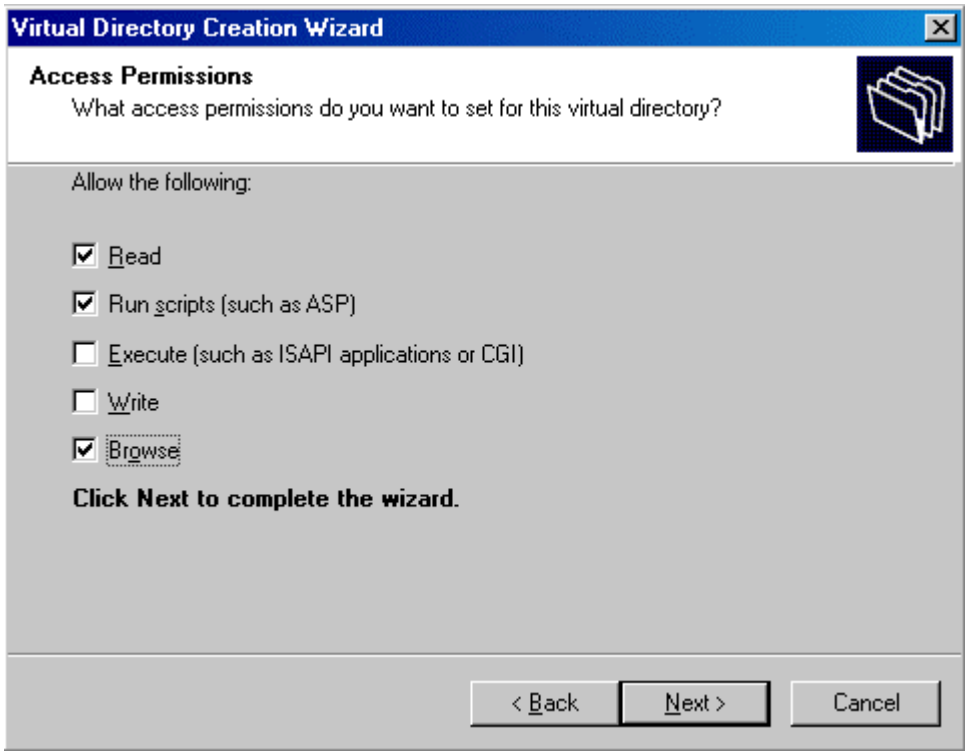
   For IIS 5.1, click Start > Internet Information Services. Expand your local host folder and expand Web Sites.

2. Click Default Web Site to highlight it.
3. Click Action in the toolbar.
4. From the drop-down menu, point to New and click Virtual Directory. The Virtual Directory Creation Wizard displays. Click Next.
5. Type the following for the alias: `Manager`

   Click Next.

6. Click Browse to select the ArcIMS Manager directory at <ArcIMS Installation Directory>\ArcIMS\Manager, and click Next.
7. For IIS 4.0, check Allow Directory Browsing and click Finish.

   For IIS 5.0 and IIS 5.1, check Browse and click Next. Click Finish.



Manager appears in the virtual directory list.

Now create virtual directories for Output and Website.

Note: If you browsed to the location of your Web server root directory to create directories for Output and Website during ArcIMS installation, skip to Step 18.

8. Click Default Web Site to highlight it.
9. Click Action, point to New, and click Virtual Directory.
10. Type the following for the alias: `output`

    Click Next.
11. Click Browse to select the ArcIMS output directory located where you placed it during installation, for example, C:\ArcIMS\output. Click Next.
12. Check Allow Directory Browsing or Browse, click Next, and click Finish. Output appears in the virtual directory list.
13. Click Default Web Site to highlight it.
14. Click Action, point to New, and click Virtual Directory.
15. Type the following for the alias: `Website`

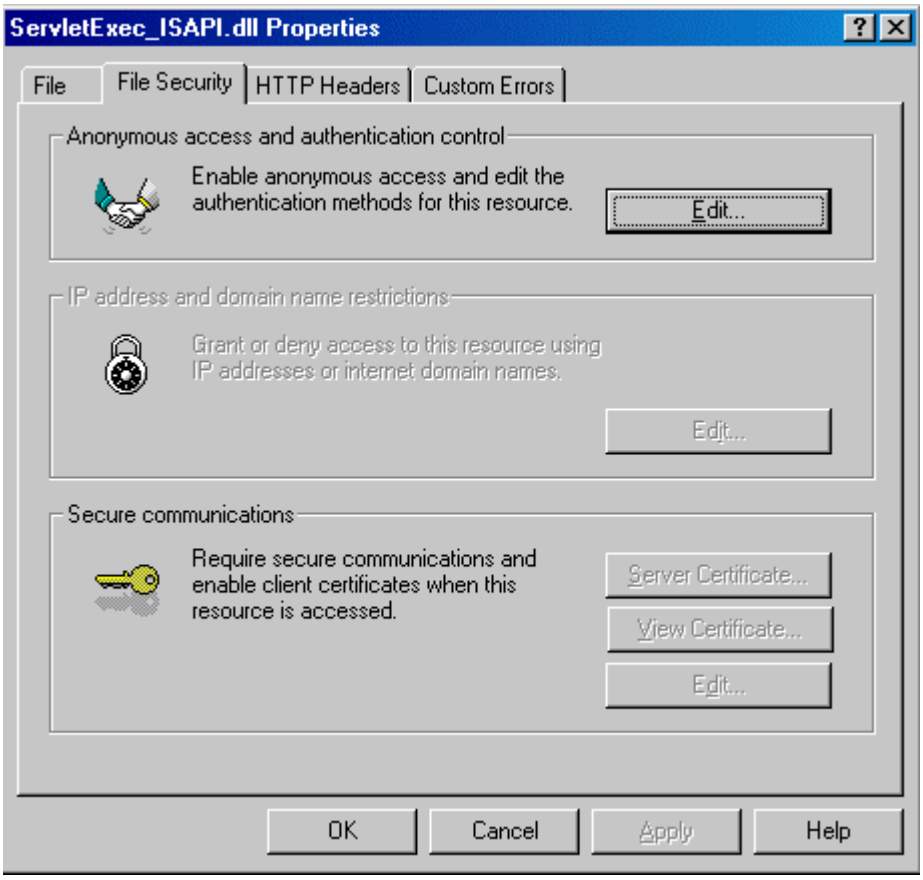
    Click Next.
16. Click Browse to select the ArcIMS Website directory located where you placed it during installation, for example, C:\ArcIMS\Website. Click Next.
17. Check Allow Directory Browsing or Browse and click Finish. Website appears in the virtual directory list.
18. Change file security for your servlet engine:

    a. In the left panel, click Scripts for JRun. In the right panel, right-click jrun.dll for JRun and select Properties.

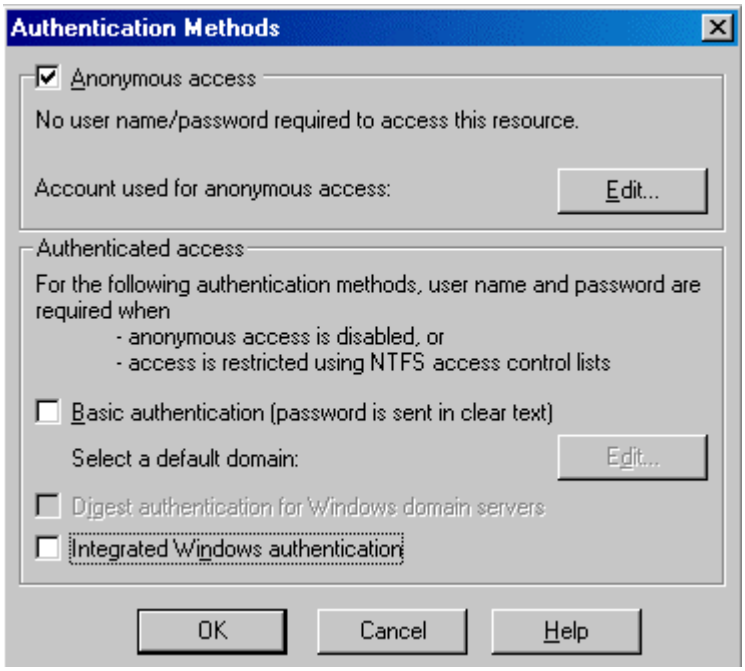
b. In the left panel, click Scripts for ServletExec. In the right panel, right-click ServletExec_ISAPI.dll and select Properties.

c. In the left panel, click jakarta for Tomcat. In the right panel, right-click isapi_redirector.dll for Tomcat and select Properties.

19. Click the File Security tab and click Edit to change the Anonymous access and authentication control.



20. Make sure Anonymous access is checked. For IIS 4.0, uncheck Windows NT Challenge/Response and click OK; for IIS 5.0 and 5.1, uncheck Integrated Windows Authentication and click OK.



21. Click OK on the properties window.
22. Close the console window. If prompted to save console settings, click Yes.

Configuring Tomcat for IIS

After installing ArcIMS, you must configure your IIS Web server for ArcIMS. If your Web server and servlet engine are not operational, contact your system administrator before you proceed. See www.apache.org for information on problems with Jakarta-Tomcat.

1. Verify that the following items are at <Tomcat Installation Directory>\Webapps\ROOT\WEB-INF\classes:
   - com directory
   - Esrimap_prop
   - ServletConnector_Res.properties
   - ServletConnector_Res_en_US.properties files
   - WMSEsrimap_prop

   If not, on Windows NT click Start > Settings > Control Panel > Services; on Windows 2000, click Start > Settings > Control Panel > Administrative Tools > Component Services and click Services on the Tree tab; on Windows XP, click Start > Control Panel > Performance and Maintenance > Administrative Tools > Component Services and click Services on the Tree tab.

   Stop IIS Admin Service, World Wide Web Publishing Service, and Jakarta. Then navigate to <ArcIMS Installation Directory>\ArcIMS\Connectors\Servlet and copy the items to that location.

   Start Jakarta, World Wide Web Publishing Service, and IIS Admin Service.

Using the Diagnostics tool to test your ArcIMS installation

2. Click Start > Programs > ArcGIS > ArcIMS > ArcIMS Diagnostics. The ArcIMS Diagnostics tool displays.
3. Select your Web server protocol, type your Web server name including domain, and type your port number. The default is 80.
4. Click 1 to test the ArcIMS Servlet Connector and 2 to test the ArcIMS Application Server.

   If these tests are successful, your ArcIMS Application Server and ArcIMS Servlet Connector are configured correctly.

   If you receive an error message, select the error number in the drop-down list and click View. The error number and a description display. Follow the instructions in the description to fix the problem and try the Diagnostics tool again.
5. Continue creating virtual directories on IIS.

See WMS for information on configuring WMS.

See Configuring Tomcat with IIS for Service Administrator for information on configuring ArcIMS Service Administrator.

See Configuring Tomcat with IIS for Metadata Explorer for information on configuring Metadata Explorer.

Creating virtual directories on IIS

After installing ArcIMS, you must create virtual directories for Manager, Output, and Website. A virtual directory is a mapped location on the Web server to a physical path.

Note: If you browsed to the location of your Web server root directory to create directories for Output and Website during ArcIMS post installation setup, you don't need to create virtual directories for Output and Website.

1. For IIS 4.0, click Start > Programs > Windows NT Option Pack > Microsoft Internet Information Server > Internet Service Manager. Expand your local host name.

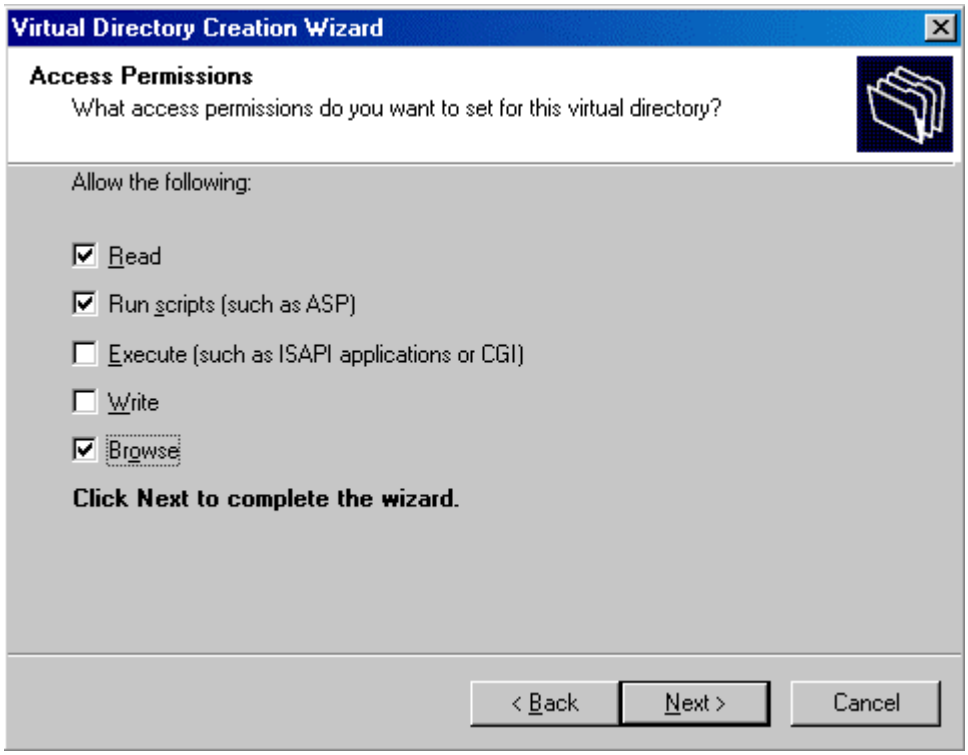
   For IIS 5.0, click Start > Settings > Control Panel > Administrative Tools > Internet Services Manager. Expand your local host name.

For IIS 5.1, click Start > Internet Information Services. Expand your local host folder and expand Web Sites.

2. Click Default Web Site to highlight it.
3. Click Action in the toolbar.
4. From the drop-down menu, point to New and click Virtual Directory. The Virtual Directory Creation Wizard displays. Click Next.
5. Type the following for the alias: Manager

   Click Next.
6. Click Browse to select the ArcIMS Manager directory at <ArcIMS Installation Directory>\ArcIMS\Manager, and click Next.
7. For IIS 4.0, check Allow Directory Browsing and click Finish.

   For IIS 5.0 and IIS 5.1, check Browse and click Next. Click Finish.



Manager appears in the virtual directory list.

Now create virtual directories for Output and Website.

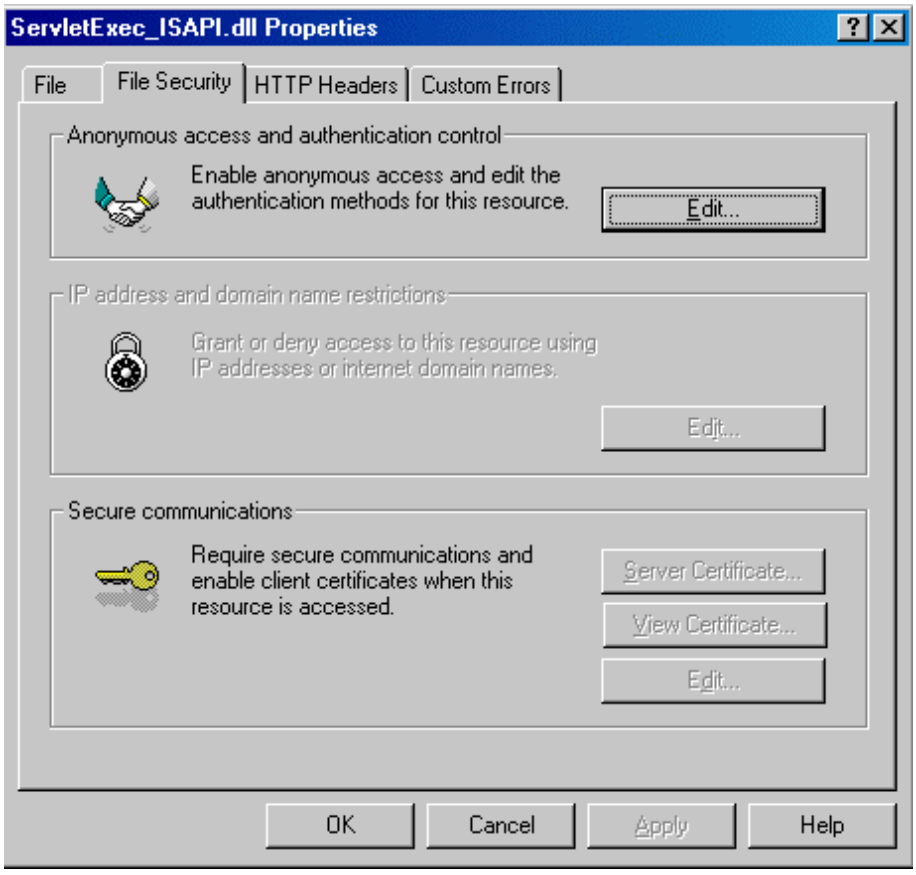
Note: If you browsed to the location of your Web server root directory to create directories for Output and Website during ArcIMS installation, skip to Step 18.

8. Click Default Web Site to highlight it.
9. Click Action, point to New, and click Virtual Directory.
10. Type the following for the alias: output

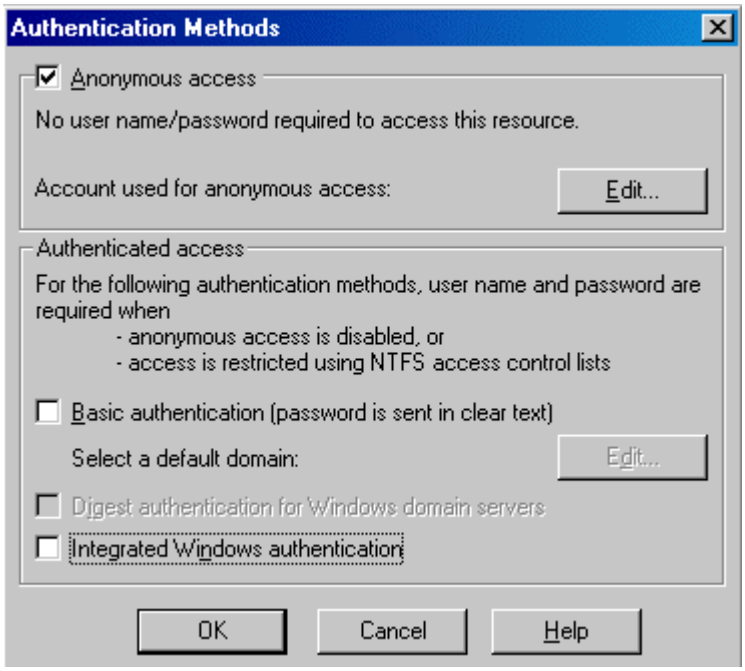
    Click Next.

11. Click Browse to select the ArcIMS output directory located where you placed it during installation, for example, C:\ArcIMS\output. Click Next.
12. Check Allow Directory Browsing or Browse, click Next, and click Finish. Output appears in the virtual directory list.
13. Click Default Web Site to highlight it.
14. Click Action, point to New, and click Virtual Directory.
15. Type the following for the alias: Website

    Click Next.
16. Click Browse to select the ArcIMS Website directory located where you placed it during installation, for example, C:\ArcIMS\Website. Click Next.
17. Check Allow Directory Browsing or Browse and click Finish. Website appears in the virtual directory list.
18. Change file security for your servlet engine:
    a. In the left panel, click Scripts for JRun. In the right panel, right-click jrun.dll for JRun and select Properties.
    b. In the left panel, click Scripts for ServletExec. In the right panel, right-click ServletExec_ISAPI.dll and select Properties.
    c. In the left panel, click jakarta for Tomcat. In the right panel, right-click isapi_redirector.dll for Tomcat and select Properties.
19. Click the File Security tab and click Edit to change the Anonymous access and authentication control.



20. Make sure Anonymous access is checked. For IIS 4.0, uncheck Windows NT Challenge/Response and click OK; for IIS 5.0 and 5.1, uncheck Integrated Windows Authentication and click OK.



21. Click OK in the properties window.
22. Close the console window. If prompted to save console settings, click Yes.

Configuring Tomcat for Apache Web Server

After installing ArcIMS, you must configure your Web server for ArcIMS. If your Web server and servlet engine are not operational, contact your system administrator before you proceed. See www.apache.org for information on problems with Jakarta-Tomcat or Apache.

1. Verify that the following items are at <Tomcat Installation Directory>\Webapps\ROOT\WEB-INF\classes:

   - com directory
   - Esrimap_prop
   - ServletConnector_Res.properties
   - ServletConnector_Res_en_US.properties
   - WMSEsrimap_prop

   If not, on Windows NT click Start > Settings > Control Panel > Services; on Windows 2000, click Start > Settings > Control Panel > Administrative Tools > Component Services and click Services on the Tree tab; on Windows XP, click Start > Control Panel > Performance and Maintenance > Administrative Tools > Component Services and click Services on the Tree tab.

   Stop your Apache and Jakarta services.

   Navigate to <ArcIMS Installation Directory>\ArcIMS\Connectors\Servlet, and copy the items to that location.

   Start the Jakarta and Apache services.

2. Click Start > Programs > Apache httpd Server > Configure Apache Server > Edit the Apache httpd.conf Configuration File.
3. Find the line: `DirectoryIndex index.html`
4. Add default.htm to the end of the line, so it reads:

   ```
   DirectoryIndex index.html default.htm
   ```

5. Save and close the file.

Creating virtual directories

After installing ArcIMS, you must create virtual directories for Manager, Output, and Website. A virtual directory is a mapped location on the Web server to a physical path.

Note: If you browsed to the location of your Web server root directory to create directories for Output and Website (the Website Working Directories) during ArcIMS installation, you don't need to create virtual directories for Output and Website.

6. Stop your Apache Web server.
7. In a text editor, open <ArcIMS Installation Directory>\ArcIMS\Common\ApacheAlias.txt and copy the contents of the file. Close the file.
8. Click Start > Programs > Apache httpd Server > Configure Apache Server > Edit the Apache httpd.conf Configuration File.
9. Under the line

   ```
   Alias /icons/ "<drive>:/Program Files/Apache Group/Apache/icons/"
   ```

   paste the lines from the ApacheAlias.txt file. Replace the paths in these lines with the appropriate paths where necessary.

10. Save and close the file.
11. Start your Apache Web Server and close the Services window.

Using the Diagnostics tool to test your ArcIMS installation

12. Click Start > Programs > ArcGIS > ArcIMS > ArcIMS Diagnostics. The ArcIMS Diagnostics tool displays.
13. Select your Web server protocol, type your Web server name including domain, and type your port number. The default is 80.
14. Click 1 to test the ArcIMS Servlet Connector and 2 to test the ArcIMS Application Server.

    If these tests are successful, your ArcIMS Application Server and ArcIMS Servlet Connector are configured correctly.

    If you receive an error message, select the error number in the drop-down list and click View. The error number and a description are displayed. Follow the instructions in the description to fix the problem and try the Diagnostics tool again.

See WMS for information on configuring WMS.

See Configuring Apache with Tomcat for ArcIMS Service Administrator for information on configuring ArcIMS Service Administrator.

See Configuring Apache with Tomcat for Metadata Explorer for information on configuring Metadata Explorer.

See Step 5: Configure ArcIMS for the final step required to get ArcIMS running.

Configuring WebLogic

After installing ArcIMS, you must configure your Web server for ArcIMS. If your Web server is not operational, contact your system administrator before you proceed. See www.bea.com for information on problems with WebLogic.

1. Verify that the following items are at \bea\wlserver6.1\config\<mydomain>\applications\DefaultWebApp\WEB-INF\classes:

   - com directory
   - Esrimap_prop
   - ServletConnector_Res.properties
   - ServletConnector_Res_en_US.properties files
   - WMSEsrimap_prop

   If the files are not at that location, navigate to <ArcIMS Installation Directory>\ArcIMS\Connectors\Servlet, and copy the items to that location.

   Note: You may need to create a classes directory.

2. Click Start > Programs > BEA Weblogic > WebLogic Server 6.1 > Start Default Console.
3. Type your user name and password.
4. On the left sidebar, click Deployments.
5. Click Web Applications.
6. Click DefaultWebApp.
7. On the right panel, under the Files tab, check the box to enable Index Directories and click Apply.
8. On Windows NT, click Start > Settings > Control Panel > Services; on Windows 2000, click Start > Settings > Control Panel > Administrative Tools > Component Services and click Services on the Tree tab; on Windows XP, click Start > Control Panel > Performance and Maintenance > Administrative Tools > Component Services and click Services on the Tree tab.
9. Stop WebLogic Web server.
10. In a text editor, open the \bea\wlserver6.1\config\mydomain\applications\DefaultWebApp\WEB-INF\Web.xml file.
11. Find the line <Web-app> and add the following under it:

```
<servlet>
<servlet-name>Esrimap</servlet-name>
<servlet-class>com.esri.esrimap.Esrimap</servlet-class>
</servlet>
<servlet-mapping>
<servlet-name>Esrimap</servlet-name>
<url-pattern>/servlet/com.esri.esrimap.Esrimap/*</url-pattern>
</servlet-mapping>
```

12. Find the line <welcome-file-list> and add the following under it:

```
<welcome-file>default.htm</welcome-file>
```

13. Save and close the file.
14. Start WebLogic Web server.

Verifying that the Web applications are deployed

15. In the WebLogic Default Console, on the left sidebar, click Servers.
16. Click <WebLogic Server Name>.
17. On the right panel, under the Deployments tab, click the Web Applications tab.
18. Ensure that the Web Applications you want to deploy are listed under Chosen in the Web App Component table, for example, defaultWebapp.
19. Click Apply.
20. Close the Default console window.

Configuring for ArcIMS Manager

If you don't plan to use the ArcIMS Manager, skip to Using the Diagnostics tool to test your ArcIMS installation.

21. In the Services window, Stop ArcIMS Tasker, ArcIMS Monitor, and ArcIMS Application Server in that order.
22. Navigate to <ArcIMS Installation Directory>\ArcIMS and copy the Manager directory to \bea\wlserver6.1\config\mydomain\applications\DefaultWebApp.
23. Start ArcIMS Application Server, ArcIMS Monitor, and ArcIMS Tasker in that order and close the Services window.

Using the Diagnostics tool to test your ArcIMS installation

24. Click Start > Programs > ArcGIS > ArcIMS > ArcIMS Diagnostics. The ArcIMS Diagnostics tool displays.
25. Select your Web server protocol, type your Web server name including domain, and type your port number. The default is 80.
26. Click 1 to test the ArcIMS Servlet Connector and 2 to test the ArcIMS Application Server.

    If these tests are successful, your ArcIMS Application Server and ArcIMS Servlet Connector are configured correctly.

    If you receive an error message, select the error number in the drop-down list and click View. The error number and a description are displayed. Follow the instructions in the description to fix the problem and try the Diagnostics tool again.

See WMS for information on configuring WMS.

See Configuring WebLogic for Service Administrator for information on configuring ArcIMS Service Administrator.

See Configuring WebLogic for Metadata Explorer for information on configuring Metadata Explorer.

See Step 5: Configure ArcIMS for the final step required to get ArcIMS running.

Configuring WebSphere 4.0.2 for IBM HTTP Server

After installing ArcIMS, you must configure your Web server for ArcIMS. If your Web server and servlet engine are not operational, contact your system administrator before you proceed. See http://www-4.ibm.com/software/Webservers for information on problems with WebSphere.

1. Verify that the following items are at \WebSphere\AppServer\installedApps\sampleApp.ear\default_app.war\WEB-INF\classes:

   - com directory
   - Esrimap_prop
   - ServletConnector_Res.properties
   - ServletConnector_Res_en_US.properties
   - WMSEsrimap_prop

   If not, on Windows NT click Start > Settings > Control Panel > Services; on Windows 2000, click Start > Settings > Control Panel > Administrative Tools > Component Services and click Services on the Tree tab; on Windows XP, click Start > Control Panel > Performance and Maintenance > Administrative Tools > Component Services and click Services on the Tree tab.

   Stop your Web server, navigate to <ArcIMS Installation Directory>\ArcIMS\Connectors\Servlet, and copy the items to that location.

   Then Start your Web server.

Creating virtual directories

After installing ArcIMS, you must create virtual directories for Manager, Output, and Website. A virtual directory is a mapped location on the Web server to a physical path.

Note: If you browsed to the location of your Web server root directory to create directories for Output and Website (the Website Working Directories) during ArcIMS installation, you don't need to create virtual directories for Output and Website.

2. Open IBM HTTP server admin by opening a browser and typing your computer name. Select Configure Server. Log on.
3. Click the Mappings folder on the left sidebar and click Aliases.
4. In the Defined aliases list, click Add. Click URL path and for the Alias for directory or filename, type the following: `/Manager`
5. For the Actual directory or filename, type the following or the alternate location you selected during installation:

   `<drive>:/<ArcIMS Installation Directory>/ArcIMS/Manager`
6. Click Apply. Click Submit on the right.

   Note: If you browsed to the location of your Web server root directory to create directories for Output and Website during ArcIMS installation, see Step 5: Configure ArcIMS for the final step required to get ArcIMS running.

7. In the Defined aliases list, click Add. Click URL path and for the Alias for directory or filename, type the following: `/Website`
8. For the Actual directory or filename, type the appropriate path, for example, C:/ArcIMS/Website.
9. Click Apply. Click Submit on the right.
10. In the Defined aliases list, click Add. Click URL path and for the Alias for directory or filename, type the following: `/output`

11. For the Actual directory or filename, type the appropriate path, for example, C:/ArcIMS/Output.
12. Click Apply. Click Submit on the right.
13. Close IBM HTTP server admin.
14. In upper right corner, click on the Restart Server button.

Using the Diagnostics tool to test your ArcIMS installation

15. Click Start > Programs > ArcGIS > ArcIMS > ArcIMS Diagnostics. The ArcIMS Diagnostics tool displays.
16. Select your Web server protocol, type your Web server name including domain, and type your port number. The default is 80.
17. Click 1 to test the ArcIMS Servlet Connector and 2 to test the ArcIMS Application Server.

    If these tests are successful, your ArcIMS Application Server and ArcIMS Servlet Connector are configured correctly.

    If you receive an error message, select the error number in the drop-down list and click View. The error number and a description are displayed. Follow the instructions in the description to fix the problem and try the Diagnostics tool again.

See WMS for information on configuring WMS.

See Configuring WebSphere for Service Administrator for information on configuring ArcIMS Service Administrator.

See Configuring WebSphere for Metadata Explorer for information on configuring Metadata Explorer.

See Step 5: Configure ArcIMS for the final step required to get ArcIMS running.

WMS

To configure ArcIMS with WMS, perform the following:

1. In a text editor, open the WMSEsrimap_prop file in the location of your Servlets directory where the Servlet Connector is installed (see the ArcIMS Configuration post installation option, enter the Web server servlet connector directory)

   For example

   Apache with ServletExec: \Program Files\New Atlanta\ServletExec AS\se-<instance-name>\Servlets

   Apache with Tomcat: \<Tomcat Installation Directory>\Webapps\ROOT\WEB-INF\classes

   IBM HTTP Server with WebSphere:
   \WebSphere\AppServer\installedApps\servlet.ear\arcimsservletconnector.war\WEB-INF\classes

   iPlanet: \iPlanet\Servers\docs\servlet

   Microsoft IIS with JRun: \Program Files\Allaire\Jrun\servlets

   Microsoft IIS with ServletExec: \Program Files\New Atlanta\ServletExec ISAPI\Servlets

   Microsoft IIS with Tomcat: \<Tomcat Installation Directory>\Webapps\ROOT\WEB-INF\classes

   Oracle Application Server: \Oracle\isuites\Apache\Jserv\servlets

   WebLogic: \bea\wlserver6.1\config\mydomain\applications\DefaultWebApp\WEB-INF\classes

   Note: If the file is not there, see Step 4: Configure your Web server.
2. Find `enable` and change it to `enable=true.`
3. Find `appServerMachine` and set it to the name of the computer where the ArcIMS Application Server is installed.
4. Find `appServerClientPort` and set it to the name of the port on which the Application Server is running (default is 5300).
5. Find `capabilitiesDir` and provide the path to the capabilities directory, for example, capabilitiesDir=c:/ArcIMS/capabilities.
6. Find `debug` and set it to `debug=true` if you want detailed debug information. If you set it to true, the log file will be created inside the working directory.
7. Find `workingDirectory` and provide the path to the working directory, for example, `workingDirectory=c:/ArcIMS/workingdir.`
8. Find `reaspec`t and set it to true if you want to reaspect the generated map images.
9. Find `defaultService` and set it to a default ArcIMS Service name. If the WMS client doesn't specify the Service, then this default Service will be used.
10. Save and close the file.
11. On Windows NT, click Start > Settings > Control Panel > Services; on Windows 2000, click Start > Settings > Control Panel > Administrative Tools > Component Services and click Services on the Tree tab; on Windows XP, click Start > Control Panel > Performance and Maintenance > Administrative Tools > Component Services and click Services on the Tree tab.
12. Stop and Start your Web server.
13. To test that WMS is installed and working, open your browser and type:

    ```
    http://<local host>/servlet/com.esri.wms.Esrimap?Cmd=ping
    ```

Note: If your Web server port is not set to the default port (port 80), then type the following:

```
http://<local host>:<port#>/servlet/com.esri.wms.Esrimap?Cmd=ping
```

The following should display: ArcIMS WMS-OGC Connector Version 4.0

For information on WMS, see ArcIMS Help.

Using the Diagnostics tool to test your ArcIMS installation

After Configuring your Web server and servlet engine, follow these steps to use the ArcIMS Diagnostics tool to test your ArcIMS installation:

1. Start > Programs > ArcGIS > ArcIMS > Diagnostics. The ArcIMS Diagnostics tool is displayed.
2. Select your Web server protocol, type your Web server name including domain, and type your port number. The default is 80.
3. Click 1 to test the ArcIMS Servlet Connector.
4. Click 2 to test the ArcIMS Application Server.

If these tests are successful, your ArcIMS Application Server and ArcIMS Servlet Connector are configured correctly.

If you receive an error message, select the error number in the drop-down list and click View. The error number and a description display. Follow the instructions in the description to fix the problem and try the Diagnostics tool again.

Configuring your Web server for ArcIMS Service Administrator

If you did not configure your Web server servlet engine using the post installation setup and you wish to use ArcIMS Service Administrator to remotely administer ArcIMS services, you must configure your Web server manually. Steps to configure your Web server for ArcIMS Service Administrator are provided for the following:

- Configuring Sun ONE 6.0 (iPlanet)
- Configuring JRun for IIS
- Configuring Oracle Application Server
- Configuring ServletExec for Apache
- Configuring ServletExec for IIS
- Configuring Tomcat for Apache
- Configuring Tomcat for IIS
- Configuring WebLogic
- Configuring WebSphere

To configure your Web server and servlet engine using the post installation setup, select the Web Server-Servlet Engine Configuration option in the post installation setup and see Web Server-Servlet Engine Configuration in the post installation section for more information.

Configuring Sun ONE 6.0 (iPlanet) for ArcIMS Service Administrator

If you wish to use ArcIMS Service Administrator to remotely administer ArcIMS services, you must configure your Web server:

1. In your Web browser, type:

   ```
   http://<local host>:<serveradminport>
   ```

   For example: http://esri:10000.

   Note: You may need to include your domain: `http://<local host.domain.com>:<serveradminport>`

   For example: http://esri.esri.com:10000.

   Note: If you don't know your server's administration port, open iPlanet\Servers\https-admserv\config\admin.conf in a text editor and read the port there.

2. Type your user name and password and click OK.
3. Click the Global Settings tab.
4. Click Configure JRE/JDK Paths on the left sidebar.
5. Click JDK.
6. For path, type the JDK Path, for example, <drive>:/jdk1.3.1_02. The Libpath and Classpath can be left blank.
7. Click OK and exit Sun ONE 6.0 (iPlanet).
8. In a text editor, open <Sun ONE 6.0 (iPlanet) Installation Directory>\https-<local host>.<domain>.com\config\Web-apps.xml.
9. Scroll to the end of the file and add the following line before </vs>.

   ```
   <Web-app uri="/esriadmin" dir="<ArcIMS Installation
   Directory>\ArcIMS\Administrator\esriadmin"/>
   ```

   Note: Make sure you specify a valid directory path for Web-app. Invalid entries for Web-app will prevent your Sun ONE 6.0 (iPlanet) Web server from starting. Also, the context path you specify, /esriadmin, is case sensitive. You might want to create additional Web-apps with names like ESRIAdmin or ESRIADMIN pointing to ArcIMS Service Administrator.

10. Save and close the file.
11. On Windows NT, click Start > Settings > Control Panel > Services; on Windows 2000, click Start > Settings > Control Panel > Administrative Tools > Component Services and click Services on the Tree tab; on Windows XP, click Start > Control Panel > Performance and Maintenance > Administrative Tools > Component Services and click Services on the Tree tab.
12. Stop and Start Sun ONE 6.0 (iPlanet) Web Server and close the Services window.

    See *Using ArcIMS,* 'Appendix A: Using ArcIMS Service Administrator,' for information.

    See Configuring Sun ONE 6.0 (iPlanet) for Metadata Explorer for information on configuring Metadata Explorer.

    See Step 5: Configure ArcIMS for the final step required to get ArcIMS running.

Configuring JRun for IIS for ArcIMS Service Administrator

If you wish to use ArcIMS Service Administrator to remotely administer ArcIMS services, you must configure your Web server:

1. Open the JRun Management Console.
2. Expand JRun Default Server.
3. Click Web Applications.
4. Click Deploy an Application.
5. For the Servlet War File or Directory, type: `<ArcIMS Installation Directory>\ArcIMS\Administrator\esriadmin.war`
6. For JRun Server Name, type: `JRun Default Server`
7. For Application Name, type: `esriadmin`
8 .For Application Host, type: `All Hosts`
9. For Application URL, type`: /esriadmin`
10. For Application Deploy Directory, leave the default path.
11. Click Deploy.
12. On Windows NT, click Start > Settings > Control Panel > Services; on Windows 2000, click Start > Settings > Control Panel > Administrative Tools > Component Services and click Services on the Tree tab; on Windows XP, click Start > Control Panel > Performance and Maintenance > Administrative Tools > Component Services and click Services on the Tree tab.
13. Stop and Start JRun Default Server and close the Services window.

See *Using ArcIMS,* 'Appendix A: Using ArcIMS Service Administrator,' for information.

See Configuring JRun for Metadata Explorer for information on configuring Metadata Explorer.

See Step 5: Configure ArcIMS for the final step required to get ArcIMS running.

Configuring Oracle Application Server for ArcIMS Service Administrator

If you wish to use ArcIMS Service Administrator to remotely administer ArcIMS services, you must configure your Web server:

1. Install Oracle9*i* AS Containers for J2EE (OC4J).

   Note: You can find OC4J in the $ORACLE_HOME\J2EE_containers\oc4j.zip file after you've installed Oracle9*i* Application Server. If you don't have the oc4j.zip file, you can install it from your Oracle9*i* Application Server installation CD or you can download it from www.oracle.com

   To install OC4J, unzip the oc4j.zip file in the Oracle installation directory and follow the instructions in the README.TXT file.

2. On Windows NT, click Start > Settings > Control Panel > Services; on Windows 2000, click Start > Settings > Control Panel > Administrative Tools > Component Services and click Services on the Tree tab; on Windows XP, click Start > Control Panel > Performance and Maintenance > Administrative Tools > Component Services and click Services on the Tree tab.
3. Stop OC4J.
4. In a text editor, open $OC4J\config\application.xml and add the following line under the line `<orion-application>`:

   ```
   <web-module id="esriadmin" path= "<ArcIMS Installation
   Directory>\ArcIMS\Administrator\esriadmin" />
   ```

5. Save and close the file.
6. In a text editor, open $OC4J\config\default-Web-site.xml and add the following under the line `<web-site port="8888">`:

   ```
     <web-app application="default" name="esriadmin" root="/esriadmin" />
   ```

7. Save and close the file.
8. Start OC4J.
9. In a text editor, open \Oracle\iSuites\Apache\Apache\conf\httpd.conf and add the following two lines:

   ```
   ProxyPassReverse /esriadmin http://<computer name>:8888/esriadmin
   ProxyPass /esriadmin http://<computer name>:8888/esriadmin
   ```

10. Save and close the file.
11. Stop and Start your Oracle Application Server and close the Services window.

    See *Using ArcIMS,* 'Appendix A: Using ArcIMS Service Administrator,' for information.

    See Configuring Oracle Application Server for Metadata Explorer for information on configuring Metadata Explorer.

    See Step 5: Configure ArcIMS for the final step required to get ArcIMS running.

Configuring ServletExec for Apache for ArcIMS Service Administrator

If you wish to use ArcIMS Service Administrator to remotely administer ArcIMS services, you must configure your Web server.

1. Click Start > Programs > New Atlanta > ServletExec 4.1.1 AS > ServletExec Admin to open ServletExec Admin.
2. On the left sidebar under Servlets, click Manage and verify that JSP10Servlet has been loaded.
3. On the left sidebar under Servlets, click Aliases and verify that there is an entry for *.jsp that points to JSP10Servlet.
4. In the left sidebar under Web Applications, click Manage.
5. Click Add Web Application.
6. For Application Name, type: `esriadmin`
7. For URL Context Path, type: `/esriadmin`

   This is the name you will use to run ArcIMS Service Administrator.

   Note: The context path you specify is case sensitive. You might want to create more than one Web Application with path names like ESRIadmin or ESRIADMIN pointing to the ArcIMS Service Administrator.
8. For Location, type: `<ArcIMS Installation Directory>\ArcIMS\Administrator\esriadmin`
9. Click Submit and close ServletExec Admin.
10. Launch the ServletExecAS install.
11. On the first screen, click Next.
12. On the Setup Type screen, select Install or Update a Web server adapter and click Next.
13. At the License Agreement screen, click Yes.
14. At the Setup Type screen, select Apache HTTP Server and click Next.
15. At the update ServletExec AS instance screen, type your host name and click Next.
16. For the application URL, type: `/esriadmin` and click Next.
17. At the Confirm ServletExec Install screen, click Next.
18. When asked to update the httpd.conf file, select Yes.
19. Click OK when informed that the httpd.conf file is updated.
20. At the InstallShield Wizard Complete screen, click Finish.
21. On Windows NT, click Start > Settings > Control Panel > Services; on Windows 2000, click Start > Settings > Control Panel > Administrative Tools > Component Services and click Services on the Tree tab; on Windows XP, click Start > Control Panel > Performance and Maintenance > Administrative Tools > Component Services and click Services on the Tree tab.
22. Stop and Start Apache Web server and ServletExec and close the Services window.

See Using ArcIMS, 'Appendix A: Using ArcIMS Service Administrator,' for information.

See Configuring ServletExec for Metadata Explorer for information on configuring Metadata Explorer.

See Step 5: Configure ArcIMS for the final step required to get ArcIMS running.

Configuring ServletExec for IIS for ArcIMS Service Administrator

If you wish to use ArcIMS Service Administrator to remotely administer ArcIMS services, you must configure your Web server.

1. Click Start > Programs > New Atlanta > ServletExec 4.1.1 ISAPI > ServletExec Admin to open ServletExec Admin.
2. On the left sidebar under Servlets, click Manage and verify that JSP10Servlet has been loaded.
3. On the left sidebar under Servlets, click Aliases and verify that there is an entry for *.jsp that points to JSP10Servlet.
4. In the left sidebar under Web Applications, click Manage.
5. Click Add Web Application.
6. For Application Name, type: `esriadmin`
7. For URL Context Path, type: `/esriadmin`
   This is the name you will use to run ArcIMS Service Administrator.

   Note: The context path you specify is case sensitive. You might want to create more than one Web Application with path names like ESRIadmin or ESRIADMIN pointing to the ArcIMS Service Administrator.

8. For Location, type:
   `<ArcIMS Installation Directory>\ArcIMS\Administrator\esriadmin`
9. Click Submit and close ServletExec Admin.
10. On Windows NT, click Start > Settings > Control Panel > Services; on Windows 2000, click Start > Settings > Control Panel > Administrative Tools > Component Services and click Services on the Tree tab; on Windows XP, click Start > Control Panel > Performance and Maintenance > Administrative Tools > Component Services and click Services on the Tree tab.
11. Stop and Start IIS Admin Service and World Wide Web Publishing Service, and close the Services window.
12. See Using ArcIMS, 'Appendix A: Using ArcIMS Service Administrator,' for information.
13. See Configuring ServletExec for Metadata Explorer for information on configuring Metadata Explorer.
14. See Step 5: Configure ArcIMS for the final step required to get ArcIMS running.

Configuring Tomcat with IIS for ArcIMS Service Administrator

If you wish to use ArcIMS Service Administrator to remotely administer ArcIMS services, you must configure your Web server.

1. Navigate to <ArcIMS Installation Directory>\ArcIMS\Administrator and copy the esriadmin folder to <Tomcat Installation Directory>\Webapps.
2. In the IIS Console, add a new virtual directory called esriadmin
   a. For IIS 4.0, click Start > Programs > Windows NT Option Pack > Microsoft Internet Information Server > Internet Service Manager.

      For IIS 5.0, click Start > Settings > Control Panel > Administrative Tools > Internet Services Manager.

      For IIS 5.1, click Start > Internet Information Services. Expand your local host folder and expand Web sites.

   b. Under the local host name, find Default Web site. Click to highlight it.
   c. Click Action in the toolbar.
   d. From the drop-down menu, point to New and click Virtual Directory. The Virtual Directory Creation Wizard displays.
   e. For alias, type: `esriadmin`
   f. Click Next.
   g. Click Browse and select the directory at <Tomcat_Home>\Webapps\esriadmin
   h. Click Next, then Finish. esriadmin appears in the virtual directory list.
3. In a text editor, open the uriworkermap.properties file located at <Tomcat Installation Directory>\conf.
4. Add the following lines:

   For Tomcat 4.x:

   ```
   # Mount the esriadmin context to the ajp13 worker
   /esriadmin/*=ajp13
   ```

   For Tomcat 3.x:

   ```
   # Mount the esriadmin context to the ajp12 worker
   /esriadmin/*=ajp12
   ```

5. Save and close the file.
6. On Windows NT, click Start > Settings > Control Panel > Services; on Windows 2000, click Start > Settings > Control Panel > Administrative Tools > Component Services and click Services on the Tree tab; on Windows XP, click Start > Control Panel > Performance and Maintenance > Administrative Tools > Component Services and click Services on the Tree tab.
7. Stop and Start IIS Admin Service, World Wide Web Publishing Service, and Jakarta, and close the Services window.

See *Using ArcIMS,* 'Appendix A: Using ArcIMS Service Administrator,' for information.

See Configuring Tomcat with IIS for Metadata Explorer for information on configuring Metadata Explorer.

See Step 5: Configure ArcIMS for the final step required to get ArcIMS running.

Configuring Tomcat for Apache for ArcIMS Service Administrator

If you wish to use ArcIMS Service Administrator to remotely administer ArcIMS services, you must configure your Web server.

1. Navigate to <ArcIMS Installation Directory>\ArcIMS\Administrator and copy the esriadmin folder to <Tomcat Installation Directory>\Webapps.
2. On Windows NT, click Start > Settings > Control Panel > Services; on Windows 2000, click Start > Settings > Control Panel > Administrative Tools > Component Services and click Services on the Tree tab; on Windows XP, click Start > Control Panel > Performance and Maintenance > Administrative Tools > Component Services and click Services on the Tree tab.
3. Stop and Start your Apache and Jakarta services and close the Services window.

See *Using ArcIMS,* 'Appendix A: Using ArcIMS Service Administrator,' for information.

See Configuring Apache with Tomcat for Metadata Explorer for information on configuring Metadata Explorer.

See Step 5: Configure ArcIMS for the final step required to get ArcIMS running.

Configuring WebLogic for ArcIMS Service Administrator

If you wish to use ArcIMS Service Administrator to remotely administer ArcIMS services, you must configure your Web server.

1. Start WebLogic Applicaton Server

   On Windows NT, click Start > Settings > Control Panel > Services; On Windows 2000, click Start > Settings > Control Panel > Administrative Tools > Component Services and click Services on the Tree tab; On Windows XP, click Start > Control Panel > Performance and Maintenance > Administrative Tools > Component Services, and click Services on the Tree tab.

   If WebLogic is not running as a Windows service, use the StartWebLogic.cmd file in the WebLogic installation directory to start WebLogic.
2. Start WebLogic Administration Console. In your Web browser, type: http://<local host.domain.com>/console
3. Type your password.
4. On the left sidebar, click Web Applications.
5. Click Configure a new Web Application.
6. For the name, type: `esriadmin`
7. For the Path, type: `<ArcIMS Installation Directory>\ArcIMS\Administrator\esriadmin`
8. Click Create.
9. Click the Targets tab.
10. In Servers, move <WebLogic Server Name> from Available to Chosen.
11. Click Apply.
12. On the left sidebar, click Servers.
13. Right-click <WebLogic Server Name>, select Stop this server, and click Yes.
14. Close the console.
15. On Windows NT, click Start > Settings > Control Panel > Services; On Windows 2000, click Start > Settings > Control Panel > Administrative Tools > Component Services, and click Services on the Tree tab; On Windows XP, click Start > Control Panel > Performance and Maintenance > Administrative Tools > Component Services, and click Services on the Tree tab.
16. Stop and start WebLogic Web server and close the Services window.

See *Using ArcIMS,* 'Appendix A: Using ArcIMS Service Administrator,' for information.

See Configuring WebLogic for Metadata Explorer for information on configuring Metadata Explorer.

See Step 5: Configure ArcIMS for the final step required to get ArcIMS running.

Configuring WebSphere 4.0.2 for ArcIMS Service Administrator

If you wish to use ArcIMS Service Administrator to remotely administer ArcIMS services, you must configure your Web server.

1. Click Start > Programs > IBM WebSphere > Application Server 4.0 AE > Administrator's Console.
2. On the tool panel, click Wizards and select Install Enterprise Application. This opens the Install Enterprise Application Wizard.
3. Select Install stand-alone module (*.war, *.jar). For Path, Browse and navigate to <ArcIMS Installation Directory>\ArcIMS\Administrator\esriadmin.war
4. For Application Name, type: esriadmin
5. For Context root for Web module, type: \esriadmin
6. Click Next and accept all the defaults until you reach the Completing the Application Installation Wizard page. Click Finish. This deploys the application.
7. After the Web application is deployed, you will see the Command "EnterpriseApp.install" completed successfully Information dialog box. Click OK.
8. Open the plugin-cfg.xml file located under <WebSphere Installation Directory>\AppServer\config

   Create an esri UriGroup if you don't have one:

   <UriGroup Name="esri">

   </UriGroup>

   Add the following to Route ServerGroup session if you don't have one.

   <Route ServerGroup="<server name>/Default Server" UriGroup="esri" VirtualHostGroup="default_host" />

   Add <Uri Name="/esriadmin/*" /> to the esri UriGroup session:

   <UriGroup Name="esri">

   <Uri Name="/esriadmin/*" />

   </UriGroup>
9. Save and close the file.
10. Stop and restart the Default Server.

See *Using ArcIMS,* 'Appendix A: Using ArcIMS Service Administrator,' for information.

See Configuring Websphere for Metadata Explorer for information on configuring Metadata Explorer.

See Step 5: Configure ArcIMS for the final step required to get ArcIMS running.

Configuring your Web server for ArcIMS Metadata Explorer

If you did not configure your Web server servlet engine using the post installation setup and you wish to use ArcIMS Metadata Explorer, you must configure your Web server manually. Steps to configure your Web server for ArcIMS Metadata Explorer are provided for the following:

- Configuring Sun ONE 6.0 (iPlanet)
- Configuring JRun for IIS
- Configuring Oracle Application Server
- Configuring ServletExec for Apache
- Configuring ServletExec for IIS
- Configuring Tomcat for Apache
- Configuring Tomcat for IIS
- Configuring WebLogic
- Configuring WebSphere

To configure your Web server servlet engine using the post installation setup, select the Web server Servlet Engine configuration option in the post installation setup and see Web Server-Servlet Engine Configuration for more information.

Configuring Sun ONE 6.0 (iPlanet) for Metadata Explorer

If you wish to use Metadata Explorer, you must configure your Web server.

Note: Skip to Step 8 below if you already configured your J2SE JRE/J2SE SDK paths for ArcIMS Service Administrator.

1. In your Web browser, type:

   ```
   http://<local host>:<serveradminport>
   ```

   For example: http://esri:10000

   ```
   http://<local host.domain.com>:<serveradminport>
   ```

   Note: You may need to include your domain. For example: http://esri.esri.com:10000

   Note: If you don't know your server's administration port, open iPlanet\Servers\https-admserv\config\admin.conf in a text editor and read the port there.

2. Type your user name and password and click OK.
3. Click the Global Settings tab.
4. Click Configure JRE/JDK Paths on the left sidebar.
5. Click JDK.
6. For path, type the J2SE SDK Path, for example, <drive>:\jdk1.3.1_02. The Libpath and Classpath can be left blank.
7. Click OK and exit Sun ONE 6.0 (iPlanet).
8. In a text editor, open <Sun ONE 6.0 (iPlanet) Installation Directory>\https-<local host>.<domain>.com\config\Web-apps.xml.
9. Scroll to the end of the file and add the following line before </vs>:

   ```
   <Web-app uri="/metadataexplorer" dir="<ArcIMS Installation
   Directory>\Metadata\metadataexplorer"/>
   ```

   Note: Make sure you specify a valid directory path for Web-app. Invalid entries for Web-app will prevent your Sun ONE 6.0 (iPlanet) Web server from starting. Also, the context path you specify, /metadataexplorer, is case sensitive. You might want to create additional Web-apps with names like MetadataExplorer or METADATAEXPLORER pointing to ArcIMS Metadata Explorer.

10. Save and close the file.
11. On Windows NT, click Start > Settings > Control Panel > Services; on Windows 2000, click Start > Settings > Control Panel > Administrative Tools > Component Services and click Services on the Tree tab; on Windows XP, click Start > Control Panel > Performance and Maintenance > Administrative Tools > Component Services and click Services on the Tree tab.
12. Stop and Start the Sun ONE 6.0 (iPlanet) Web Server and close the Services window.

See *Creating and Using Metadata Services* for information on Metadata Explorer.

See Step 5: Configure ArcIMS for the final step required to get ArcIMS running.

Configuring JRun for IIS for Metadata Explorer

If you wish to use Metadata Explorer, you must configure your Web server.

1. Open the JRun Management Console.
2. Expand JRun Default Server.
3. Click Web Applications.
4. Click Deploy an Application.
5. For the Servlet War File or Directory, type: `<ArcIMS Installation Directory>\ArcIMS\Metadata\metadataexplorer.war`
6. For JRun Server Name, type: `JRun Default Server`
7. For Application Name, type: `metadataexplorer`
8. For Application Host, type`: All Hosts`
9. For Application URL, type: `/metadataexplorer`
10. For Application Deploy Directory, leave the default path.
11. Click Deploy.
12. On Windows NT, click Start > Settings > Control Panel > Services; on Windows 2000, click Start > Settings > Control Panel > Administrative Tools > Component Services and click Services on the Tree tab; on Windows XP, click Start > Control Panel > Performance and Maintenance > Administrative Tools > Component Services and click Services on the Tree tab.
13. Stop and Start JRun Default Server and close the Services window.
14. Navigate to <ArcIMS Installation Directory>\ArcIMS\Metadata\MetadataExplorer\WEB-INF\classes and copy the aimsmeta.properties file to <JRun Installation Directory>\servers\default\metadataexplorer\WEB-INF\classes.

See *Creating and Using Metadata Services* for information on Metadata Explorer.

See Step 5: Configure ArcIMS for the final step required to get ArcIMS running.

Configuring Oracle Application Server for Metadata Explorer

If you wish to use Metadata Explorer, you must configure your Web server.
Note: Skip to Step 3 below if you already installed Oracle9*i*AS Containers for ArcIMS Service Administrator.

1. Install Oracle9*i* AS Containers for J2EE (OC4J).

   Note: You can find OC4J in the $ORACLE_HOME\J2EE_containers\oc4j.zip file after you've installed Oracle9*i* Application Server. If you don't have the oc4j.zip file, you can install it from your Oracle9*i* Application Server installation CD or you can download it from www.oracle.com.

   To install OC4J, unzip the oc4j.zip file in the Oracle installation directory and follow the instructions in the README.TXT file.

2. On Windows NT, click Start > Settings > Control Panel > Services; on Windows 2000, click Start > Settings > Control Panel > Administrative Tools > Component Services and click Services on the Tree tab; on Windows XP, click Start > Control Panel > Performance and Maintenance > Administrative Tools > Component Services and click Services on the Tree tab.

3. Stop OC4J.

4. In a text editor, open $OC4J\config\application.xml and add the following line under the line <orion-application>:

   ```
   <Web-module id="metadataexplorer" path= "<ArcIMS Installation
   Directory>\ArcIMS\Metadata\metadataexplorer" />
   ```

5. Save and close the file.

6. In a text editor, open $OC4J\config\default-Web-site.xml and add the following under the line <Web-site port="8888">:

   ```
   <Web-app application="default" name="metadataexplorer" root="/metadataexplorer"
   />
   ```

7. Save and close the file.

8. Start OC4J.

9. In a text editor, open \Oracle\iSuites\Apache\Apache\conf\httpd.conf and add the following two lines:

   ```
   ProxyPass /metadataexplorer http://<computer name>:8888/metadataexplorer
   ```

   ```
   ProxyPassReverse /metadataexplorer http://<computer name>:8888/metadataexplorer
   ```

10. Save and close the file.

11. Stop and Start your Oracle Application Server and close the Services window.

See *Creating and Using Metadata Services* for information on Metadata Explorer.

See Step 5: Configure ArcIMS for the final step required to get ArcIMS running.

Configuring ServletExec for Apache for Metadata Explorer

If you wish to use Metadata Explorer, you must configure your Web server.

1. Click Start > Programs > New Atlanta > ServletExec 4.1.1 AS > ServletExec Admin to open ServletExec Admin.

   Note: Skip to Step 4 below if you already verified that JSP10Servlet has been loaded for ArcIMS Service Administrator.
2. On the left sidebar under Servlets, click Manage and verify that JSP10Servlet has been loaded.
3. On the left sidebar under Servlets, click Aliases and verify that there is an entry for *.jsp that points to JSP10Servlet.
4. In the left sidebar under Web Applications, click Manage.
5. Click Add Web Application.
6. For Application Name, type: `metadataexplorer`
7. For URL Context Path, type: /`metadataexplorer`

   This is the name you will use to run Metadata Explorer.

   Note: The context path you specify is case sensitive. You might want to create more than one Web Application with path names like MetadataExplorer or METADATAEXPLORER pointing to the ArcIMS Metadata Explorer.
8. For Location, type: `<ArcIMS Installation Directory>\ArcIMS\metadata\metadataexplorer`
9. Click Submit and close ServletExec Admin.
10. Launch the ServletExecAS install.
11. On the first screen, click Next.
12. On the Setup Type screen, select Install or Update a Web server adapter and click Next.
13. At the License Agreement screen, click Yes.
14. At the Setup Type screen, select Apache HTTP Server and click Next.
15. At the update ServletExec AS instance screen, type your host name and click Next.
16. For the application URL, type: `/metadataexplorer and click Next.`
17. At the Confirm ServletExec Install screen, click Next.
18. When asked to update the httpd.conf file, select Yes.
19. Click OK when informed that the httpd.conf file is updated.
20. At the InstallShield Wizard Complete screen, click Finish.
21. On Windows NT, click Start > Settings > Control Panel > Services; on Windows 2000, click Start > Settings > Control Panel > Administrative Tools > Component Services and click Services on the Tree tab; on Windows XP, click Start > Control Panel > Performance and Maintenance > Administrative Tools > Component Services and click Services on the Tree tab.
22. Stop and Start Apache Web server and ServletExec and close the Services window.

See *Creating and Using Metadata Services* for information on Metadata Explorer.

See Step 5: Configure ArcIMS for the final step required to get ArcIMS running.

Configuring ServletExec for IIS for Metadata Explorer

If you wish to use Metadata Explorer, you must configure your Web server.

1. Click Start > Programs > New Atlanta > ServletExec 4.1.1 ISAPI > ServletExec Admin to open ServletExec Admin.

   Note: Skip to Step 4 below if you already verified that JSP10Servlet has been loaded for ArcIMS Service Administrator.

2. On the left sidebar under Servlets, click Manage and verify that JSP10Servlet has been loaded.
3. On the left sidebar under Servlets, click Aliases and verify that there is an entry for *.jsp that points to JSP10Servlet.
4. In the left sidebar under Web Applications, click Manage.
5. Click Add Web Application.
6. For Application Name, type: `metadataexplorer`
7. For URL Context Path, type: `/metadataexplorer`
   This is the name you will use to run ArcIMS Service Administrator.

   Note: The context path you specify is case sensitive. You might want to create more than one Web Application with path names like MetadataExplorer or METADATAEXPLORER pointing to the ArcIMS Metadata Explorer.

8. For Location, type:
   `<ArcIMS Installation Directory>\ArcIMS\Metadata\MetadataExplorer`
9. Click Submit and close ServletExec Admin.
10. On Windows NT, click Start > Settings > Control Panel > Services; on Windows 2000, click Start > Settings > Control Panel > Administrative Tools > Component Services and click Services on the Tree tab; on Windows XP, click Start > Control Panel > Performance and Maintenance > Administrative Tools > Component Services and click Services on the Tree tab.
11. Stop and Start IIS Admin Service and World Wide Web Publishing Service, and close the Services window.

See *Creating and Using Metadata Services* for information on Metadata Explorer.

See Step 5: Configure ArcIMS for the final step required to get ArcIMS running.

Configuring Tomcat for IIS for Metadata Explorer

If you wish to use Metadata Explorer, you must configure your Web server.

1. Navigate to <ArcIMS Installation Directory>\ArcIMS\Metadata and copy the MetadataExplorer folder to <Tomcat Installation Directory>\Webapps.
2. In the IIS Console, add a new virtual directory called metadataexplorer
   a. For IIS 4.0, click Start > Programs > Windows NT Option Pack > Microsoft Internet Information Server > Internet Service Manager.

      For IIS 5.0, click Start > Settings > Control Panel > Administrative Tools > Internet Services Manager.

      For IIS 5.1, click Start > Internet Information Services. Expand your local host folder and expand Web sites.

   b. Under the local host name, find Default Web Site. Click to highlight it.
   c. Click Action in the toolbar.
   d. From the drop-down menu, point to New and click Virtual Directory. The Virtual Directory Creation Wizard displays.
   e. For alias, type: metadataexplorer
   f. Click Next.
   g. Click Browse and select the directory at <Tomcat_Home>\Webapps\metadataexplorer.
   h. Click Next, then Finish. metadataexplorer appears in the virtual directory list.
3. In a text editor, open the uriworkermap.properties file located at <Tomcat Installation Directory>\conf.
4. Add the following lines:

   For Tomcat 4.x:

   ```
   # Mount the metadataexplorer context to the ajp13 worker
   /metadataexplorer/*=ajp13
   ```

   For Tomcat 3.x:

   ```
   # Mount the metadataexplorer context to the ajp12 worker
   /metadataexplorer/*=ajp12
   ```

5. Save and close the file.
6. On Windows NT, click Start > Settings > Control Panel > Services; on Windows 2000, click Start > Settings > Control Panel > Administrative Tools > Component Services and click Services on the Tree tab; on Windows XP, click Start > Control Panel > Performance and Maintenance > Administrative Tools > Component Services and click Services on the Tree tab.
7. Stop and Start IIS Admin Service, World Wide Web Publishing Service, and Jakarta and close the Services window.

See *Creating and Using Metadata Services* for information on Metadata Explorer.

See Step 5: Configure ArcIMS for the final step required to get ArcIMS running.

Configuring Tomcat for Apache for Metadata Explorer

If you wish to use Metadata Explorer, you must configure your Web server.

1. Navigate to <ArcIMS Installation Directory>\ArcIMS\Metadata and copy the MetadataExplorer folder to <Tomcat Installation Directory>\Webapps.
2. On Windows NT, click Start > Settings > Control Panel > Services; on Windows 2000, click Start > Settings > Control Panel > Administrative Tools > Component Services and click Services on the Tree tab; on Windows XP, click Start > Control Panel > Performance and Maintenance > Administrative Tools > Component Services and click Services on the Tree tab.
3. Stop and Start your Apache and Jakarta services and close the Services window.

See *Creating and Using Metadata Services* for information on Metadata Explorer.

See Step 5: Configure ArcIMS for the final step required to get ArcIMS running.

Configuring WebLogic for Metadata Explorer

If you wish to use Metadata Explorer, you must configure your Web server.

1. Click Start > Programs > BEA Weblogic > WebLogic Server > Start Default Console.
2. Type your password.
3. On the left sidebar, click Web Applications.
4. Click Configure a new Web Application.
5. For Name, type: MetadataExplorer
6. For Path, type: `<ArcIMS Installation Directory>\ArcIMS\Metadata\metadataexplorer`
7. Click Create.
8. Click the Targets tab.
9. In Servers, move <WebLogic Server Name> from Available to Chosen.
10. Click Apply.
11. Close the console.

See *Creating and Using Metadata Services* for information on Metadata Explorer.

See Step 5: Configure ArcIMS for the final step required to get ArcIMS running.

Configuring WebSphere 4.0.2 for Metadata Explorer

If you wish to use Metadata Explorer, you must configure your Web server.

1. Click Start > Programs > IBM WebSphere > Application Server 4.0 AE > Administrator's Console.
2. On the tool panel, click Wizards and select Install Enterprise Application. This opens the Install Enterprise Application Wizard.
3. Select Install stand-alone module (*.war, *.jar). For Path, Browse and navigate to <ArcIMS Installation Directory>\ArcIMS\Metadata\metadataexplorer.war.
4. For Application Name, type: metadataexplorer
5. For Context root for Web module, type: /metadataexplorer
6. Click Next and accept all the defaults until you reach the Completing the Application Installation Wizard page. Click Finish. This deploys the application.
7. After the Web application is deployed, you will see the Command EnterpriseApp.install completed successfully Information dialog box. Click OK.
8. Open the plugin-cfg.xml file located under <WebSphere Installation Directory>\AppServer\config

   Create an esri UriGroup if you don't have one:

   <UriGroup Name="esri">

   </UriGroup>

   Add the following to Route ServerGroup session if you don't have one.

   <Route ServerGroup="<server name>/Default Server" UriGroup="esri" VirtualHostGroup="default_host" />

   Add <Uri Name="/metadataexplorer/*" /> to the esri UriGroup session:

   <UriGroup Name="esri">

   <Uri Name="/metadataexplorer/*" />

   </UriGroup>
9. Save and close the file.
10. Stop and restart the "Default Server".

See *Creating and Using Metadata Services* for information on Metadata Explorer.

See Step 5: Configure ArcIMS for the final step required to get ArcIMS running.

Step 5: Configure ArcIMS

Perform the following activities to set up your ArcIMS environment:

- Increase memory parameters for Java VM.
- Set your Windows NT PATH variable.
- Set your Windows 2000 PATH variable.
- Set your Windows XP PATH variable.
- Use ArcIMS with a proxy server.

Increasing memory parameters for Java VM

ESRI recommends that you increase the Java Virtual Machine memory parameters to support ArcIMS Manager and the Java Viewers.

Use memory amounts that are relative to the total amount of computer memory. If you have 256 MB of total RAM, do not allocate the entire amount. The -Xms value specifies the minimum amount of memory that is used by the Java VM. The -Xmx value specifies the maximum amount of memory that the Java VM can use. When you change the -Xmx value, it must be less than the total available virtual memory. On Windows, total virtual memory consists of the RAM memory plus the pagefile memory. You can find this value in the Windows Task Manager, on the Performance tab, under Commit Charge Limit. **Note:** The Commit Charge Limit figure should not be used as the Java VM parameter.

1. Click Start > Settings > Control Panel > Java Plug-in.

   Note: On Windows XP, you may need to switch to Classic View to see the Java Plug-in. Click the box in the upper left on the Control Panel to Switch to Classic View.

2. Set the required memory parameters in the field named Java RunTime Parameters:

   ```
   javaw.exe -Xms<initial memory>m -Xmx<maximum memory>m
   ```

   For example: javaw.exe -Xms10m -Xmx256m

3. Click Apply and close the window.

Setting your Windows NT PATH variable

In order to use the Java Advanced Imaging (JAI) libraries from Sun, you need to edit your PATH variable.

1. Click Start > Settings > Control Panel and double-click System.
2. Click the Environment tab.
3. In the System Variables window, click PATH (or create it if it doesn't already exist.
4. Click in the Value window and add to the end of the value:

   ```
   <drive>:\<System J2SE JRE installation location>\bin
   ```

   Note: The system J2SE JRE installation location is <drive>:\Program Files\Java\j2re1.4.0\bin if you are installing the registered J2SE JRE system provided with the ArcIMS post installation and you are accepting the default installation directory.

5. Click OK and close the Control Panel window.

Setting your Windows 2000 PATH variable

In order to use the JAI libraries from Sun, you need to edit your PATH variable.

1. Click Start > Settings > Control Panel and double-click System.
2. Click the Advanced tab.
3. Click Environment Variables.
4. In the System Variable window:
   a. Click your system variable PATH.
   b. Click Edit and add to the end of the value:

      ```
      <drive>:<System J2SE JRE installation location>\bin
      ```

      Note: The system J2SE JRE installation location is <drive>:\Program Files\Java\j2re1.4.0\bin if you are installing the registered J2SE JRE system provided with the ArcIMS post installation and you are accepting the default installation directory.
5. Click OK and close the Control Panel window.

Setting your Windows XP PATH variable

In order to use the JAI libraries from Sun, you need to edit your PATH variable. If necessary, click the box in the upper left on the Control Panel to Switch to Category View.

1. Click Start > Control Panel > Performance and Maintenance > System.
2. Click the Advanced tab.
3. Click Environment Variables.
4. In the System Variable window
   a. Click your system variable PATH.
   b. Click Edit and add to the end of the value:

      ```
      <drive>:<System J2SE JRE installation location>\bin
      ```

      Note: The J2SE JRE system installation location is <drive>:\Program Files\Java\j2re1.4.0\bin if you are installing the registered J2SE JRE system provided with the ArcIMS post installation and you are accepting the default installation directory.
5. Click OK and close the Control Panel window.

Using ArcIMS with a proxy server

Use the Proxy Server properties to specify whether your local area network (LAN) uses a proxy server to connect to the Internet. A proxy server is a computer on your LAN that connects to the Internet without compromising the security of your internal network. If you are not sure how your LAN connects to the Internet, contact your system administrator.

If you use proxy servers, then set the appropriate properties in the aimsproxy.properties file, which is located in your user profiles directory.

- If your LAN uses a proxy server to connect to the Internet for HTTP protocol requests

  1. Find and open the aimsproxy.properties file in a text editor.
  2. Set the Host name and Port of the proxy server to use. For example: `httpproxyhost=proxy.esri.com`
     `httpproxyport=5000`

- If your LAN connects to the Internet via a proxy server using a secure HTTP (HTTPS)

  1. Find and open the aimsproxy.properties file in a text editor.
  2. Set the Host name and Port of the https proxy server to use. For example:
     `httpsproxyhost=httpsproxy.esri.com`
     `httpsproxyport=5010`

  If your LAN does not use a proxy server and is directly connected to the Internet, do *not* set these properties. By default, they are not set.

  You are ready to use ArcIMS.

Adding additional ArcIMS installation components

If you did not choose to add other ArcIMS components during the initial installation, they can be added later.

Note: Adding additional installation components requires access to the original installation source. This includes the ArcIMS CD or the network location if you installed from a network source.

The program listed in Add/Remove is ArcGIS ArcIMS.

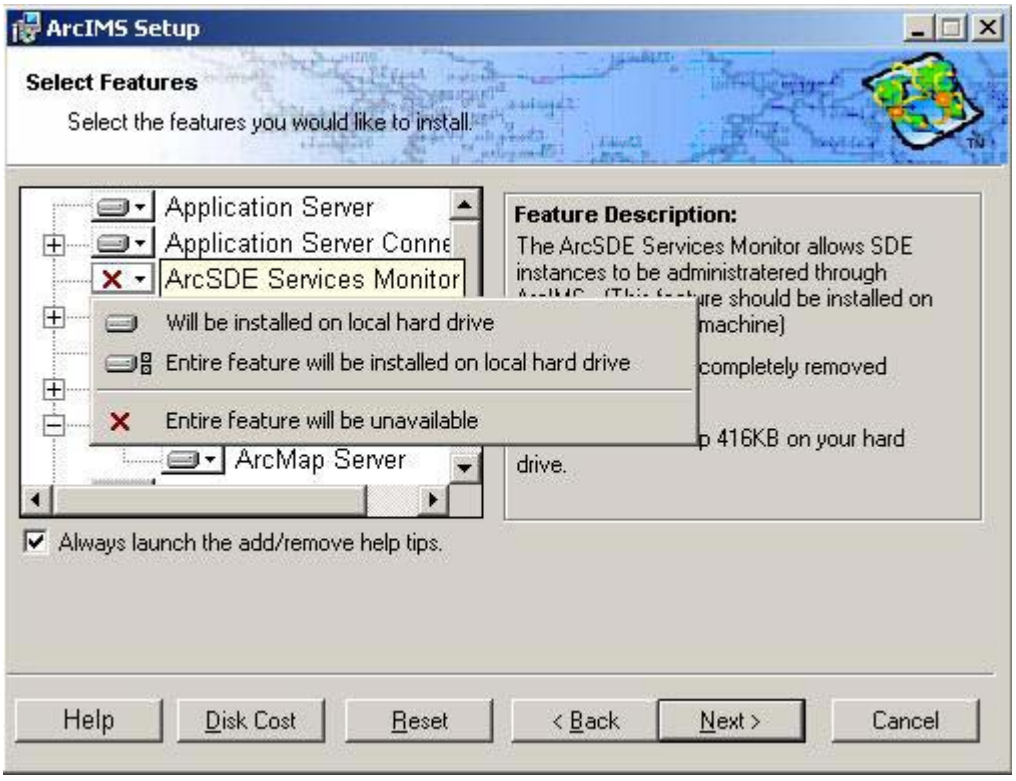
Microsoft Windows NT

From the Start button, click Settings then Control Panel. Double-click the Add/Remove Programs icon. On the Install/Uninstall tab, select ArcGIS ArcIMS from the program list, then click the Add/Remove button. This will start the installation; you can then select the components you would like added to your installation.

Microsoft Windows 2000/Microsoft Windows XP

From the Start button, click Settings, then Control Panel. Double-click the Add/Remove Programs Icon. Select ArcGIS ArcIMS from the program list, then click the Change button. This will start the installation. Click the Add/Remove button, you can then select the components you would like added to your installation.

The Add/Remove process displays the installation dialog box showing the current installation state. You can choose to install components not currently installed (noted with a red X). Those components already installed can also be removed. The Add/Remove state toggles the current state between installed and unavailable (remove) or unavailable and installed. It is not necessary to select or change the installation state of those components that you don't wish to affect.



Note: If ArcMap Server and the ActiveX Connector are not listed in the Add/Remove dialog box, verify that you have met the system requirements for these features. ArcMap Server requires Internet Explorer 5.0.1 or higher, and MDAC 2.5. Internet Explorer 5.0.1 or higher is also required for the ActiveX connector. ArcMap Server cannot be installed on a machine that has ArcGIS Desktop or ArcInfo Workstation installed. If these system requirements are not met, then these installation features will not be displayed in Add/Remove. Make sure your system meets the installation requirements, then launch Add/Remove again.

Troubleshooting

Online Troubleshooting articles

Troubleshooting ArcIMS Installation

ArcIMS Viewer must be removed before installing ArcIMS—Article 23357 at http://support.esri.com/search/KbDocument.asp?dbid=23357

Post installation setup—Web server servlet engine configuration completed with errors—Article 23672 at http://support.esri.com/search/KbDocument.asp?dbid=23672

Error: Please enter a valid username on your domain—Article 23727 at http://support.esri.com/search/KbDocument.asp?dbid=23727

(Windows only) AdminSiteApplet is not found for Manager—Article 20394 at http://support.esri.com/search/KbDocument.asp?dbid=20394

Troubleshooting Web server and servlet engine

Jakarta Tomcat service fails to start due to internal error—Article 22327 at http://support.esri.com/search/KbDocument.asp?dbid=22327

HowTo: Update ServletExec to use a new version of JRE—Article 20340 at http://support.esri.com/search/KbDocument.asp?dbid=20340

(Windows only) Tomcat service fails to start—Article 18766 at http://support.esri.com/search/KbDocument.asp?dbid=18766

Check out http://support.esri.com/search/KbDocument.asp?dbid=23450 for information on setting up your Web server and servlet engine.

Troubleshooting Application start up after installation

Unable to login to Administrator in ArcIMS—Article 23057 at http://support.esri.com/search/KbDocument.asp?dbid=23057

Add virtual server failed—Article 22055 at http://support.esri.com/search/KbDocument.asp?dbid=22055

(LINUX only) Map service not available due to fonts missing—Article 22185 at http://support.esri.com/search/KbDocument.asp?dbid=22185

ArcIMS services or Tomcat stop immediately after starting—Article 20915 at http://support.esri.com/search/KbDocument.asp?dbid=20915

Reset ArcIMS so that Administrator prompts for new user information—Article 15442 at http://support.esri.com/search/KbDocument.asp?dbid=15442

HowTo: Create a scripts virtual directory in IIS—Article 23622 at http://support.esri.com/search/KbDocument.asp?dbid=23622

HowTo: View error messages generated by Administrator, Author, and ArcExplorer—Java while developing an ArcIMS site—Article 19439 at http://support.esri.com/search/KbDocument.asp?dbid=19439

HowTo: Enable Complete Logging for the ArcIMS Application Server and Spatial Server—Article 20844 at http://support.esri.com/search/KbDocument.asp?dbid=20844

Unable to add ArcMapImage Service because the ArcMap image server is not showing up—Article 22034 at http://support.esri.com/search/KbDocument.asp?dbid=22034

Unable to create an ArcMap Image Service—Article 22039 at http://support.esri.com/search/KbDocument.asp?dbid=22039

"Requested Map Service not available" error in HTML viewer—Article 21331 at http://support.esri.com/search/KbDocument.asp?dbid=21331

URL is invalid, or ArcIMS is not running in Administrator—Article 23444 at http://support.esri.com/search/KbDocument.asp?dbid=23444

Uninstalling ArcIMS 4.0.1

Note: To uninstall other versions of ArcIMS, see the appropriate install guide.

Note: To review your installation settings, refer to the log file created during the ArcIMS installation located at <ArcIMS Installation Directory>\ArcIMS\Common\InstallSummary.log.

1. To uninstall ArcIMS on Windows NT, click Start > Settings > Control Panel and double-click Add/Remove Programs; on Windows 2000, click Start > Settings > Control Panel > Add or Remove Programs; on Windows XP, click Start > Control Panel and double-click Add or Remove Programs.

   Note: If you are using Sun ONE 6.0 (iPlanet) Web server on Windows NT, click Start > Settings > Panel > Services; on Windows 2000, click Start > Settings > Control Panel > Administrative Tools > Component Services. Then Stop your Web server.

2. Select ArcGIS ArcIMS and click Add/Remove on Windows NT or Change/Remove on Windows 2000 or Windows XP. (**Note:** On Windows 2000 or XP, if you select Remove, all ArcIMS installed components will be uninstalled).

3. Select Remove All to remove ArcIMS from this machine. Select Add/Remove to install or uninstall specific installation components. See Adding additional installation features for information on using Add/Remove.

4. After successfully uninstalling, close the ArcIMS Setup.

5. ArcIMSFolders.sez and ArcIMSSite.sez (configuration file for saved services) are files containing your ArcIMS preferences. They aren't deleted during the ArcIMS uninstall process. Find and delete these files or back them up for future use.

6. Stop your Web server and servlet engine.

7. Navigate to \Program Files\ArcGIS, or the alternate location you selected during installation, and delete the ArcIMS directory.

8. Navigate to your ArcIMS Working Directory, usually \ArcIMS\Axl, and verify that the metadata directory has been deleted.

9. Navigate to \ArcIMS\Website or the alternate location you selected for your Website directory during installation and verify that the htmlviewer, install, and javaviewer directories have been deleted.

10. Navigate to your servlets directory and verify that the com directory, Esrimap_prop, ServletConnector_Res.properties, ServletConnector_Res_en_US.properties, and WMSEsrimap_prop files have been deleted.

    For example:

    Apache with ServletExec: \Program Files\New Atlanta\ServletExec AS\se-<instance-name>\Servlets

    Apache with Tomcat: <Tomcat Installation Directory>\Webapps\ROOT\WEB-INF\classes; esriadmin and MetadataExplorer directories from <Tomcat Installation Directory>\Webapps, if applicable

    IBM HTTP Server with WebSphere 3.5.5:
    \WebSphere\AppServer\installedApps\sampleApp.ear\default_app.war\WEB-INF\classes

    Sun ONE 6.0 (iPlanet): \iPlanet\Servers\docs\servlet

    Microsoft IIS with JRun: \Program Files\Allaire\Jrun\servlets

    Microsoft IIS with ServletExec: \Program Files\New Atlanta\ServletExec ISAPI\Servlets

    Microsoft IIS with Tomcat: <Tomcat Installation Directory>\Webapps\ROOT\WEB-INF\classes; esriadmin and MetadataExplorer directories from <Tomcat Installation Directory>\Webapps, if applicable

    Oracle Application Server: \Oracle\iAS\Apache\Jserv\servlets

    WebLogic: \bea\wlserver6.1\config\mydomain\applications\DefaultWebApp\WEB-INF\classes; Manager directory from \bea\wlserver6.1\config\mydomain\applications\DefaultWebApp

11. Go to your <system J2SE JRE location>\lib\ext. If these folders contain any ArcIMS JAR files or DLLs, delete them:

    Note: If you have ArcExplorer 4.0.1—Java Edition installed, do not delete the JAR files.

    - **ext directory:** arcims_admin.jar, arcims_admincore.jar, arcims_aej.jar, arcims_author.jar, arcims_designer.jar, arcims_resadmin.jar, arcims_resaej.jar, arcims_resauthor.jar, arcims_resdesigner.jar, esri_mo10.jar, esri_mo10res.jar, jai_codec.jar, jai_core.jar, jaxp.jar, jcert.jar, jnet.jar, jsde82_sdk.jar, jsde82_sdkres.jar, jsse.jar, mlibwrapper_jai.jar, and parser.jar

    Note: If you installed the ArcSDE Services Monitor, you also need to delete jsde82_sdk.jar and jsde82_sdkres.jar.

    Note: If you installed the ArcSDE812 update for ArcIMS, delete the \bak31 directory in the lib\ext directory.

    - **bin directory:** mlib_jai.dll and mlib_jai_mmx.dll

    Note: All *jai*.* files are part of Sun's JAI package but are distributed with ArcIMS to facilitate the display of images.

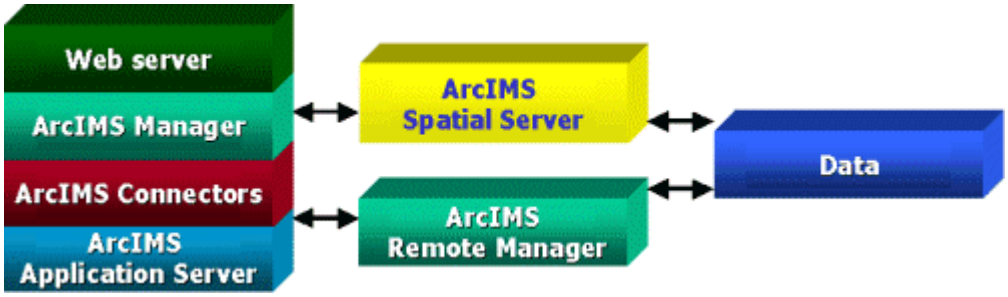
12. Start your Web server and servlet engine.
13. Clear the jar_cache and any TLB files from your temp directory.
14. Delete your Temporary Internet files from your Web browser.
15. Delete aimsclient.properties, aimsdefault.properties, and aimsproxy.properties (if applicable) from your user profile.

    Note: If you have ArcExplorer 4.0.1—Java Edition installed, *do not* delete the aimsclient.properties file.

16. Reboot your computer to clear your system.

Installing ArcIMS Remote Manager

The Remote ArcIMS Manager installation allows you to run ArcIMS Manager on a computer other than where the Web server and ArcIMS Host (with ArcIMS Manager) reside. Because the ArcIMS Manager contains Java applets, it requires J2SE JRE. This installation installs J2SE JRE along with some additional files for ArcIMS Manager on your remote computer. If you plan to use Remote Manager, you need to make changes to your ArcIMS Host computer; after the installation, you need to make changes to your remote computer as described below.



Note: Remote Manager is supported on Windows only.

Note: You must uninstall previous versions of ArcIMS Manager and ArcExplorer—Java Edition before you install ArcIMS Manager.

Before you begin, you should identify the following locations. Typically, these are all on the ArcIMS Host, but they may be in other locations.

- Data directory
- AXL directory
- Website directory

There are three steps to setting up a remote ArcIMS Manager configuration.

1. Set up the ArcIMS Host computer.
2. Install ArcIMS Manager on the remote computer.
3. Set up ArcIMS Manager on the remote computer.

Now you are ready to test the ArcIMS Remote Manager.

Also see Troubleshooting tips for ArcIMS Remote Manager

Setting up the ArcIMS Host computer for ArcIMS Remote Manager

You must also share the network drives to support the use of ArcIMS Remote Manager. See Sharing network drives for Remote ArcIMS Manager.

If you use the IIS or Sun ONE 6.0 (iPlanet) Web server, you also must make changes to your Web server. See

- Configuring your IIS Web server for Remote ArcIMS Manager
- Configuring your Sun ONE 6.0 (iPlanet) Web server for ArcIMS Remote Manager

Sharing network drives for Remote ArcIMS Manager

In order for the remote ArcIMS Manager to access the Output, Website, and data directories from the ArcIMS Host, you need to share these directories and later establish a UNC connection to them from the remote computer.

The shared drives establish the following access:

- They permit the Remote Computer to access the data directory, Output directory, and Website directory.
- The map configuration file (*.axl) must contain the data directory accessible by the Web server. If the Web server cannot find the data, you will get an error when trying to create an ArcIMS Service from the map configuration file. If you want to author files on one computer and serve them from another, the data path needs to be accessible by both computers.

The following instructions take you through the steps on the ArcIMS Host computer. In this example, C:\ArcIMS is the directory which contains the AXL, Website, and Output directories. Change this location as needed based on the working directories you set during installation on the ArcIMS Host. In this example, <drive>:\GISData is the data directory.

1. Click Start > Programs > Windows NT Explorer on Windows NT; Start > Programs > Accessories > Windows Explorer on Windows 2000; or Start > All Programs > Accessories > Windows Explorer on Windows XP.
2. Navigate to C:\ArcIMS.
3. Right-click the directory and click Sharing on Windows NT and Windows 2000 or Sharing and Security on Windows XP.
4. Click Shared As and click OK on Windows NT, or click Share this Folder and click OK on Windows 2000 and Windows XP.
5. Share your <drive>:\GISData directory in the same manner.

Now you may install ArcIMS Manager on a remote computer.

Configuring your IIS Web server for Remote ArcIMS Manager

The following instructions are for IIS only. If you are using another Web server, continue to the topic on Sharing network drives for Remote ArcIMS Manager.

If you use IIS, you need to make a change to the virtual directory properties for the Website directory.

1. For IIS 4.0, click Start > Programs > Windows NT Option Pack > Microsoft Internet Information Server > Internet Service Manager.

   For IIS 5.0, click Start > Settings > Control Panel > Administrative Tools > Internet Services Manager.

   For IIS 5.1, click Start > Internet Information Services. Expand your local host folder and expand Web Sites.
2. Right-click the Website virtual directory and click Properties.
3. For IIS 4.0, click the Virtual Directory tab, and for the Permissions setting click Script.

   For IIS 5.0 and IIS 5.1, click the Virtual Directory tab, and for the Execute Permissions setting click Script only.

   Note: This setting should not be set to Execute.
4. Click OK and close the console window.

Configuring your Sun ONE 6.0 (iPlanet) Web server for ArcIMS Remote Manager

The following instructions are for Sun ONE 6.0 (iPlanet) only. If you are using another Web server, continue to the topic Sharing network drives for Remote ArcIMS Manager.

If you use Sun ONE 6.0 (iPlanet), you need to make a change in the configuration of the MIME type property. The MIME type file tells the Web server what to do when an incoming request is looking for a particular file extension. The Remote ArcIMS Manager installation requests Manager.exe, and the MIME type for the .exe extension needs to be edited so the Web server can handle files with this extension correctly.

Note: If you configured your Web server using the Web Server-Servlet Engine Configuration option in the post installation setup, these steps have been automatically completed for you.

1. Start Sun ONE 6.0 (iPlanet) Administration Server from the Start menu or from your Web browser.
2. Type your user name and password and click OK.

3. Select your server from the drop-down list and click Manage.
4. In the left sidebar, click Mime Types.
5. Select the Edit option and click OK. Click OK again.
6. On the Global Mime Types list, find `Content-Type: application/octet-stream File Suffix: bin`
7. Click Edit and add `.exe` to the File Suffix.
8. Click Change MIME Type and OK to update the record.
9. Scroll down and find `Content-Type: magnus-internal/cgi File Suffix: cgi,exe,bat`
10. Click Edit and Remove `exe,` from the File Suffix.
11. Click Change MIME Type and OK to update the record.
12. Click Apply in the upper right corner.
13. Select Apply Changes to stop and start the Web server.
14. Exit Sun ONE 6.0 (iPlanet).

Installing ArcIMS Manager on a remote computer

Now you are ready to install ArcIMS Manager on a computer remote from your ArcIMS Host.

Note: You must uninstall previously installed versions of ArcIMS Manager and ArcExplorer—Java Edition before you install ArcIMS Manager 4.0.1.

Perform the following steps on the remote computer:

1. Open your Internet Explorer Web browser and type the URL to ArcIMS Manager on the ArcIMS Host computer:

   `http://<ArcIMS Host>.<domain>.com/manager`
   This begins the installation of the ArcIMS Manager on the remote computer.

   Note: Manager should be the same case as set on the ArcIMS Host.
   Note: If you do not have the correct Java Plug-in, you will be prompted to install Java 2 Runtime Environment, otherwise skip to Step 6.
2. At the Security Warning screen for InstallAnywhere Web Installer, click Yes.
3. At the Locale selection screen, choose a language and click Install.
4. At the Software License Agreement screen, click Yes.
5. At the Choose Destination screen, click Next.
6. At the Select Browser screen, make sure Internet Explorer is selected and click Next. J2SE JRE 1.3.1 is now installed on the computer.
7. At the Security Warning screen, click Grant this Session.
8. Click Start Installer for Windows.
9. At the language screen, choose a language and click OK.
10. At the Welcome screen, click Next.
11. At the J2SE JRE and Java Plug-in screen, click Next.
12. At the Installation Directory screen, click Next.

13. At the Choose Java Virtual Machine screen, click Install.
14. At the Protocol Information screen, click the button next to the protocol used by your ArcIMS Host. Click Next.
15. At the ArcIMS Host Information screen, enter your host information. This should be the same host name as the URL in the browser. Click Next.
16. At the Summary screen, click Next
17. At the Install Complete screen, click Done.
18. Close the browser.

Now set up ArcIMS Manager on the remote computer.

Setting up ArcIMS Manager on the remote computer

Now you are ready to edit the files that allow the Remote Manager to find directories on the ArcIMS Host. This example assumes that you have the Data, Output, Website and AXL directories on the ArcIMS Host computer and that you shared the ArcIMS and GISData directories used in the example in Sharing network drives for Remote ArcIMS Manager.

The aimsdefaults.properties file contains all the path names that ArcIMS needs to create and view Web sites. This file needs to be edited to incorporate all of the newly mapped drives for your configuration.

1. Find the aimsdefaults.properties file. Typically it is in the user's Profiles directory.
2. Open the file in a text editor.
3. Verify that the following properties have each occurrence of <ArcIMS Host> replaced with the name of your ArcIMS Host computer, for example,

   ```
   ImageURL=http\://<ArcIMS Host>.<domain>.com/output
   HostALIAS=<ArcIMS Host>.com
   HostURL=http\://<ArcIMS Host>.<domain>.com
   Host name=<ArcIMS Host>.<domain>.com
   ```

4. For the following properties, change the path to include the UNC path to the shared directory. In this example, the Website and AXL directories are subdirectories in the shared ArcIMS directory, for example,
   ```
   WorkingDir=//<ArcIMS Host>/ArcIMS/axl
   WebSiteDir=//<ArcIMS Host>/ArcIMS/Website
   ```
   Note: You may need to add the WebSiteDir property.
5. Save and close the file.

Note: If you wish to access the data, you must map a drive to the shared Data directory.

Note: To edit a map configuration file before adding it as an ArcIMS Service, map a drive to the shared ArcIMS\AXL directory on the ArcIMS Host computer.

Now you are ready to test ArcIMS Remote Manager.

Testing ArcIMS Remote Manager

To test ArcIMS Remote Manager

1. Open your Internet Explorer Web browser and type the URL to ArcIMS Manager on the ArcIMS Host computer:

   ```
   http://<ArcIMS Host>.<domain>.com/manager
   ```

Note: Manager should be the same case as set on the ArcIMS Host.

2. ArcIMS Manager should display. If not, close and open your Web browser to delete old files stored in the Internet cache.
3. You can now log in and start authoring and designing Web pages.

Testing ArcIMS Author

1. Open ArcIMS Manager.
2. Select Login to ArcIMS and type your user name and password.
3. Select Author a Service.
4. Add a map file using data accessible to both the remote computer and the ArcIMS Host computer.
5. Click Next.
6. Before adding this map file as a service, open the map configuration file in a text editor.
7. Replace the mapped drive with a UNC path to the data. For example: \\<ArcIMS Host>\<Shared resource name>.
8. Save the file and close the text editor.
9. In ArcIMS Remote Manager, type a name for the service and select a virtual server. Click Next and Save.

   Note: If you receive an error stating 'Unable to add <name of map file>', check to ensure that the data path within the map file has been modified to reflect a UNC path name.
10. Close ArcIMS Manager.

Testing ArcIMS Designer

1. Open ArcIMS Remote Manager.
2. Type your user name and password.
3. Select Design Web Site.
4. Follow the instructions in the Wizard to create a Web site.
5. Open a Browser to view the Web site.

   Note: If you receive an error stating 'Unable to display map service. Image directory not found or writable.' Check that the following property in the aimsdefaults.properties file points to the ArcIMS Host Output directory:

   ```
   ImageURL=http\://<ArcIMS Host>.<domain>.com/output
   ```

Also see Troubleshooting tips for ArcIMS Remote Manager

Troubleshooting tips for ArcIMS Remote Manager

- When authoring an ArcIMS Service, data must be accessible from both locations through UNC. You must open each map configuration file in a text editor and change the data path to reflect UNC; then choose Administer the site and start the MapService. If you do not edit your map configuration files, you will get an error when you try to create the Services.

Note: In general, access to shapefiles is much faster if the shapefiles reside on the same computer as the ArcIMS Spatial Server.

- When designing the Web site, the Create Web Site panel defaults to the Website directory established in Setting up ArcIMS Manager on the remote computer, Step 4. This creates the Web pages on the ArcIMS Host.

  If you decide to create map configuration files and Web pages on the remote computer, you need to change the directory on the Create Web Site panel. In this case, you will later need to copy them to the ArcIMS Host and possibly update directories in the map configuration files.

Installing ArcIMS Viewer

The ArcIMS Viewer installation allows your end users to view ArcIMS Web sites created using the Java Viewers.

The client is supported on Windows 98, Windows NT, Windows 2000, Windows XP, HP-UX, IBM AIX, Linux Red Hat, SGI IRIX and Sun Solaris; 128 MB of RAM are required for the Java clients.

Note: You must uninstall ArcExplorer—Java Edition on your Windows computer before you install ArcIMS Viewer.

The items installed are:

- Java Plug-in 1.3 or higher (if needed)
- ESRI ArcIMS Viewer
- ArcExplorer—Java 4.0.1

See the section for your platform:

- Installing ArcIMS Viewer on HP-UX
- Installing ArcIMS Viewer on IBM AIX
- Installing ArcIMS Viewer on Linux Red Hat
- Installing ArcIMS Viewer on Microsoft Windows
- Installing ArcIMS Viewer on SGI IRIX
- Installing ArcIMS Viewer on Sun Solaris

Installing ArcIMS Viewer on HP-UX

The ArcIMS Host computer runs the ArcIMS Web site, and the ArcIMS remote computer accesses the Web site from a Web browser via the Intranet or Internet.

An Intranet client has NFS access to the ArcIMS Host, and an Internet client has only HTTP access.

Note: ArcIMS Web sites created using the Java Custom Viewer cannot be viewed from an HP-UX remote computer.

To view ArcIMS Web sites created using the ArcIMS Java Standard Viewer, the following components must be installed on the remote computer:

- J2SE JRE 1.3 (the Java Plug-in is included with J2SE JRE)
- ArcIMS Viewer

If the remote computer has ArcIMS Manager or ArcExplorer—Java Edition installed, the J2SE JRE and ArcIMS Viewer are already available on it. If not, Internet clients are prompted to install these via the ArcIMS Viewer installation. Intranet clients can copy the necessary components to their computer. See Installing ArcIMS Viewer on a remote HP-UX computer.

There are four steps required to set up a remote ArcIMS Viewer.

1. Set up the ArcIMS Host computer.
2. Install J2SE JRE 1.3 on a remote computer.
3. Install ArcIMS Viewer on a remote HP-UX computer.
4. Set up ArcExplorer—Java Edition on a remote computer.

The steps have different instructions for Internet and Intranet clients, where appropriate.

Setting up the ArcIMS Host computer on UNIX/Linux

To provide Internet clients with the ability to download the ArcIMS Viewer from an ArcIMS Web site, the ArcIMS Web site Administrator must do the following:

```
cp -r $AIMSHOME/ViewerDownLoad/install <path to your ArcIMS Website directory>
```

For information on the ArcIMS Website directory specific to the type of Web server you are using, see Configuring your Web server for HP-UX, IBM AIX, Linux Red Hat, SGI IRIX, or Sun Solaris.

If you are using iPlanet Web server, you must make changes to support the use of ArcIMS Viewer. See the instructions for Configuring your Sun ONE 6.0 (iPlanet) Web server for ArcIMS Viewer.

Once you have set up the ArcIMS Host computer, the next step is to install J2SE JRE 1.3 or higher on a remote HP-UX, IBM AIX, Linux Red Hat, SGI IRIX, or Sun Solaris computer.

Installing J2SE JRE 1.3 or higher on a remote HP-UX computer

Internet clients only

When a remote HP-UX computer tries to access an ArcIMS Java Standard Web site, the application automatically detects whether the J2SE JRE and the plug-in are installed. If not, the browser is redirected to the HP Web site at http://www.hp.com/ to download J2SE JRE 1.3. If you have already installed J2SE JRE 1.3 but still receive the redirect message, the plug-in may not be configured properly.

Internet and Intranet clients

1. Register and follow the instructions to download and install JRE.
2. ESRI recommends that you increase the Java VM memory parameters. Open the Java Plug-in Control Panel and set the required memory parameters in the field named Java Run Time parameters to

   ```
   -Xms10m -Xmx256m
   ```

   and click Apply.

   The Java Plug-in Control Panel is located at <J2SE JRE Installation Directory>/bin/ControlPanel.
3. Configure J2SE JRE 1.3:
   a. Make sure the correct J2SE JRE is being used. Add the following to your .cshrc file:

      ```
      setenv JAVA_HOME <J2SE JRE Installation Directory>
      set path = ( $JAVA_HOME/bin $path)
      ```

      For Netscape to use the correct plug-in, add the following variables to your .cshrc file:

      ```
      setenv NPX_PLUGIN_PATH <path to Java install>/plugin/PA_RISC/ns4 setenv
      NPX_JRE _PATH <J2SE JRE Installation Directory>
      ```

   b. Source the .cshrc file:

      ```
      source .cshrc
      ```

   Once you have J2SE JRE 1.3 installed, the next step is to install ArcIMS Viewer.

Installing ArcIMS Viewer on a remote HP-UX computer

Internet clients only

1. Once you have installed J2SE JRE and configured Java Plugin (JPI), close your browser to clear the cache and reopen it.

2. Type the URL to the ArcIMS Web site:

   ```
   http://<host name>/Website/<name>/default.htm
   ```

3. At the ESRI ArcIMS Viewer screen, click Download installer for UNIX.
4. The ArcIMS Viewer installer is automatically downloaded to your $HOME directory. The Viewer installer AEJava.bin is saved under $HOME/IA_Installers/ESRI_ArcIMS_Viewer directory. The Viewer installer is automatically executed.
5. At the language screen, choose a language and click OK.
6. At the Location of J2SE JRE screen, choose the location where you installed J2SE JRE 1.3. This should be the same as what your $NPX_JRE _PATH variable is set to in Step 4 of Installing J2SE JRE 1.3 on a remote HP-UX computer. Click Next.

   Note: You must have write access to the lib and bin directories in JRE.

7. At the Introduction screen, click Next.
8. At the Installation Directory screen, choose the installation directory and click Install. The installer creates a directory called AEJava4.0 at this location.

   Note: The Viewer JAR files and libraries are installed directly into the J2SE JRE directory that you selected in Step 8. See the install.log file located in AEJava4.0/UninstallerData for a list of where each file is copied.

9. At the Install Complete screen, click Done.
10. Close the browser to clear the cache, and reopen it.

You are now ready to view ArcIMS Web pages created using the Java Standard Viewer. Proceed to Setting up ArcExplorer—Java Edition on a remote UNIX/Linux computer.

Intranet clients only

Check with your ArcIMS system administrator if you do not know what $AEJHOME should be set to.

1. Copy the Viewer *.jar files to your J2SE JRE ext directory:

   ```
   cp $AEJHOME/lib/*.jar $NPX_JRE _PATH/lib/ext
   ```

2. Add $AEJHOME/lib to your LD_LIBRARY_PATH in your .cshrc file:

   ```
   setenv LD_LIBRARY_PATH $AEJHOME/lib:$LD_LIBRARY_PATH
   ```

You are now ready to view ArcIMS Web pages created using the Java Standard Viewer. Proceed to Setting up ArcExplorer—Java Edition on a remote UNIX/Linux computer.

Setting up ArcExplorer—Java Edition on a remote UNIX/Linux computer

Intranet and Internet clients

Check with your ArcIMS system administrator if you do not know what $AEJHOME should be set to.

1. To enable ArcExplorer—Java Edition, set the following variable in your .cshrc file:

   ```
   setenv AEJHOME <ArcExplorer Installation Directory>/aej40exe
   ```

2. In your .cshrc file, add $AEJHOME/bin to your $PATH variable or set an alias to the startup script:

   ```
   set path = ( $path $AEJHOME/bin )
   ```

   or

```
alias aejava $AEJHOME/bin/aejava
```

3. To enable ArcExplorer—Java Edition Help, copy the aimsclient.properties file from <ArcExplorer Installation Directory>/Xenv to your $HOME directory, open the file in a text editor, and edit the values for

   ```
   WebBrowser=<Netscape Installation Directory>/netscape
   AEJavaHelp=<ArcExplorer Installation Directory>/aej40exe/Help/aejava_help.htm
   ```

   Save and close the file.

4. Source your .cshrc file:

   ```
   source .cshrc
   ```

5. To start ArcExplorer—Java Edition, type

   ```
   aejava
   ```

You can now use ArcExplorer—Java Edition to view local data and ArcIMS services.

Note: If your remote IBM AIX computer accesses an ArcIMS Web site created using the Java Standard Viewer on Windows or Solaris, then you will encounter the following warning message: 'You need a font named Arial to view data from this server.' Click OK. This is just a warning message, and it should not affect the functionality of the Java Standard Viewer.

Note: If your remote Windows computer accesses an ArcIMS Web site created using the Java Custom Viewer on SGI IRIX, then you will encounter the following warning message: 'You need a font named Helvetica to view data from this server.' Click OK. This is just a warning message, and it should not affect the functionality of the Java Custom Viewer.

Installing ArcIMS Viewer on IBM AIX

The ArcIMS Host computer runs the ArcIMS Web site, and the ArcIMS remote computer accesses the Web site from a Web browser via the Intranet or Internet.

An Intranet client has NFS access to the ArcIMS Host, and an Internet client has only HTTP access.

Note: ArcIMS Web sites created using the Java Custom Viewer cannot be viewed from an AIX remote computer.

To view ArcIMS Web sites created using the ArcIMS—Java Standard Viewer, the following components must be installed on the remote computer:

- J2SE JRE 1.3 or higher (the Java Plug-in is included with J2SE JRE)
- ArcIMS Viewer

If the remote computer has ArcExplorer—Java Edition installed, the J2SE JRE and ArcIMS Viewer are already available on it. If not, Internet clients are prompted to install these via the ArcIMS Viewer installation. Intranet clients can copy the necessary components to their computer. See Installing ArcIMS Viewer on a remote AIX computer.

There are four steps required to set up a remote ArcIMS Viewer.

1. Set up the ArcIMS Host computer on UNIX/Linux.
2. Install J2SE JRE 1.3 or higher on a remote IBM AIX computer.
3. Install ArcIMS Viewer on a remote IBM AIX computer.
4. Set up ArcExplorer—Java Edition on a remote UNIX/Linux computer.

The steps have different instructions for Internet and Intranet clients, where appropriate.

Setting up the ArcIMS Host computer on UNIX/Linux

To provide Internet clients with the ability to download the ArcIMS Viewer from an ArcIMS Web site, the ArcIMS Web site Administrator must do the following:

```
cp -r $AIMSHOME/ViewerDownLoad/install <path to your ArcIMS Website directory>
```

For information on the ArcIMS Website directory specific to the type of Web server you are using, see Configuring your Web server for HP-UX, IBM AIX, Linux Red Hat, SGI IRIX, or Sun Solaris.

If you are using iPlanet Web server, you must make changes to support the use of ArcIMS Viewer. See the instructions for Configuring your iPlanet Web server for ArcIMS Viewer.

Once you have set up the ArcIMS Host computer, the next step is to install J2SE JRE 1.3 or higher on a remote HP-UX, IBM AIX, Linux Red Hat, SGI IRIX, or Sun Solaris computer.

Installing J2SE JRE 1.3 or higher on a remote IBM AIX computer

Internet clients only

When a remote computer tries to access an ArcIMS Java Standard Web site, the application automatically detects whether the J2SE JRE and Plug-in are installed. If it does not detect your J2SE JRE, you need to go to the following IBM Web site to download J2SE JRE 1.3 or higher: http://www.ibm.com/java/J2SE SDK.

If you have already installed J2SE JRE 1.3 or higher, but it is not detected, the Plug-in may not be configured properly. Skip to Step 4 below for instructions on configuring J2SE JRE 1.3 or higher and the Plug-in.

Internet and Intranet clients

The URL for the IBM J2SE JRE 1.3 or higher download is http://www.ibm.com/java/J2SE SDK.

1. Register and follow the instructions to download the JRE.

2. ESRI recommends that you increase the Java VM memory parameters. Open the Java Plug-in Control Panel located at <J2SE JRE Installation Directory>/bin/JavaPluginControlPanel. Set the required memory parameters in the field named Java Run Time Parameters:

   ```
   -Xms10m –Xmx256m
   ```

   Click Apply.

3. Make sure that you add $JAVA_HOME/bin to LIBPATH. See system requirements for more information.

4. Configure J2SE JRE 1.3 or higher.

   a. Make sure the correct J2SE JRE is being used. Add the following to your .cshrc file:

   ```
   setenv JAVA_HOME <J2SE JRE Installation Directory>
   set path = ( $JAVA_HOME/bin $path)
   ```

   b. Source the .cshrc:

   ```
   source .cshrc
   ```

   c. For Netscape to use the correct plug-in, copy the javaplugin.a file from your $JAVA_HOME/bin directory to your Netscape plugin directory:

   ```
   cp <J2SE JRE Installation Directory>/bin/javaplugin.a  <Netscape Installation
   Directory>/plugins
   ```

5. Once you have J2SE JRE 1.3 or higher installed, the next step is to install ArcIMS Viewer.

Installing ArcIMS Viewer on a remote IBM AIX computer

Internet clients only

1. Once you have installed JRE, close your browser to clear the cache and reopen it.

2. Type the URL to the ArcIMS Web site:

   ```
   http://<host name>/Website/<name>/default.htm
   ```

3. At the ESRI ArcIMS Viewer screen, click Start Installer for AIX.

4. The ArcIMS Viewer installer is automatically downloaded to your $HOME directory. The Viewer installer: AEJava.bin is saved under $HOME/IA_Installers/ESRI_ArcIMS_Viewer directory. The Viewer installer is automatically executed.

5. At the language screen, choose a language and click OK.

6. At the Location of J2SE JRE screen, choose the location where you installed J2SE JRE 1.3 or higher. This should be the same as what your $JAVA_HOME variable is set to in Step 3 of Installing J2SE JRE 1.3 or higher on a remote computer. Click Next.

   Note: You must have write access to the lib and bin directories in JRE.

7. At the Introduction screen, click Next.

8. At the Installation Directory screen, choose the installation directory and click Install. The installer creates a directory called AEJava4.0 at this location.

   Note: The Viewer JAR files and libraries are installed directly into the J2SE JRE directory that you selected in Step 8. See the install.log file located in AEJava4.0/UninstallerData for a list of where each file is copied.

9. At the Install Complete screen, click Done.

10. Close the browser to clear the cache, and reopen it.

You are now ready to view ArcIMS Web pages created using the Java Standard Viewer. Proceed to Setting up ArcExplorer—Java Edition on a remote UNIX/Linux computer.

Intranet clients only

Check with your ArcIMS system administrator if you do not know what $AEJHOME should be set to.

1. Copy the Viewer *.jar files to your J2SE JRE ext directory:

   ```
   cp $AEJHOME/lib/*.jar <J2SE JRE Installation Directory>/lib/ext
   ```

2. Add $AEJHOME/lib to your LIBPATH in your .cshrc file:

   ```
   setenv LIBPATH $AEJHOME/lib:$LIBPATH
   ```

You are now ready to view ArcIMS Web pages created using the Java Standard Viewer. Proceed to Setting up ArcExplorer—Java Edition on a remote UNIX/Linux computer.

Setting up ArcExplorer—Java Edition on a remote UNIX/Linux computer

Intranet and Internet clients

Check with your ArcIMS system administrator if you do not know what $AEJHOME should be set to.

1. To enable ArcExplorer—Java Edition, set the following variable in your .cshrc file:

   ```
   setenv AEJHOME <ArcExplorer Installation Directory>/aej40exe
   ```

2. In your .cshrc file, add $AEJHOME/bin to your $PATH variable or set an alias to the startup script:

   ```
   set path = ( $path $AEJHOME/bin )
   ```

   or

   ```
   alias aejava $AEJHOME/bin/aejava
   ```

3. To enable ArcExplorer—Java Edition Help, copy the aimsclient.properties file from <ArcExplorer Installation Directory>/Xenv to your $HOME directory, open the file in a text editor, and edit the values for:

   ```
   WebBrowser=<Netscape Installation Directory>/netscape

   AEJavaHelp=<ArcExplorer Installation Directory>/aej40exe/Help/aejava_help.htm
   ```

   Save and close the file.

4. Source your .cshrc file:

   ```
   source .cshrc
   ```

5. To start ArcExplorer—Java Edition, type:

   ```
   aejava
   ```

You can now use ArcExplorer—Java Edition to view local data and ArcIMS services.

Note: If your remote IBM AIX computer accesses an ArcIMS Web site created using the Java Standard Viewer on Windows or Solaris, then you will encounter the following warning message: 'You need a font named Arial to view data from this server.' Click OK. This is just a warning message, and it should not affect the functionality of the Java Standard Viewer.

Note: If your remote Windows computer accesses an ArcIMS Web site created using the Java Custom Viewer on SGI IRIX, then you will encounter the following warning message: 'You need a font named Helvetica to view data from this server.' Click OK. This is just a warning message, and it should not affect the functionality of the Java Custom Viewer.

Installing ArcIMS Viewer on Linux Red Hat

The ArcIMS Host computer runs the ArcIMS Web site, and the ArcIMS remote computer accesses the Web site from a Web browser via the Intranet or Internet.

An Intranet client has NFS access to the ArcIMS Host, and an Internet client has only HTTP access.

Note: ArcIMS Web sites created using the Java Custom Viewer cannot be viewed from a Linux remote computer.

To view ArcIMS Web sites created using the ArcIMS Java Standard Viewer, the following components must be installed on the remote computer:

- J2SE JRE 1.3 or higher (the Java Plug-in is included with J2SE JRE)
- ArcIMS Viewer

If the remote computer has ArcIMS Manager or ArcExplorer—Java Edition installed, the J2SE JRE and ArcIMS Viewer are already available on it. If not, Internet clients are prompted to install these via the ArcIMS Viewer installation. Intranet clients can copy the necessary components to their computer. See Installing ArcIMS Viewer on a remote Linux computer.

There are four steps required to set up a remote ArcIMS Viewer.

1. Set up the ArcIMS Host computer.
2. Install J2SE JRE 1.3 or higher on a remote computer.
3. Install ArcIMS Viewer on a remote Linux computer.
4. Set up ArcExplorer—Java Edition on a remote computer.

The steps have different instructions for Internet and Intranet clients, where appropriate.

Setting up the ArcIMS Host computer on UNIX/Linux

To provide Internet clients with the ability to download the ArcIMS Viewer from an ArcIMS Web site, the ArcIMS Web site Administrator must do the following:

```
cp -r $AIMSHOME/ViewerDownLoad/install <path to your ArcIMS Website directory>
```

For information on the ArcIMS Website directory specific to the type of Web server you are using, see Configuring your Web server for HP-UX, IBM AIX, Linux Red Hat, SGI IRIX, or Sun Solaris.

If you are using iPlanet Web server, you must make changes to support the use of ArcIMS Viewer. See the instructions for Configuring your iPlanet Web server for ArcIMS Viewer.

Once you have set up the ArcIMS Host computer, the next step is to install J2SE JRE 1.3 or higher on a remote HP-UX, IBM AIX, Linux Red Hat, SGI IRIX, or Sun Solaris computer.

Installing J2SE JRE 1.3 or higher on a remote Linux Red Hat computer

Internet clients only

When a remote Linux computer tries to access an ArcIMS—Java Standard Web site, the application automatically detects whether the J2SE JRE and the Plug-in are installed. If not, the browser is redirected to the Sun Web site at http://java.sun.com/j2se/ to download J2SE JRE 1.3 or higher. If you have already installed J2SE JRE 1.3 or higher but still receive the redirect message, the Plug-in may not be configured properly. Skip to Step 4 below for instructions on configuring J2SE JRE 1.3 and the Plug-in.

Internet and Intranet clients

The URL for the Linux J2SE JRE 1.3 or higher download is http://java.sun.com/j2se/.

1. Register and follow the instructions to download and install J2SE JRE.

2. ESRI recommends that you increase the Java VM memory parameters. Open the Java Plug-in Control Panel and set the required memory parameters in the field named Java Run Time parameters to

   ```
   -Xms10m -Xmx256m
   ```

   and click Apply.

   The Java Plug-in Control Panel is located at <J2SE JRE Installation Directory>/bin/ControlPanel.

3. Execute the J2SE JRE script for Linux.
4. Configure J2SE JRE 1.3 or higher:

   a. Make sure the correct J2SE JRE is being used. Add the following to your .cshrc file:

   ```
   setenv JAVA_HOME <J2SE JRE Installation Directory>
   set path = ( $JAVA_HOME/bin $path)
   ```

   For Netscape to use the correct plug-in, add the following variables to your .cshrc file:

   ```
   setenv NPX_PLUGIN_PATH <J2SE JRE Installation Directory>/plugin/i386/ns4
   setenv NPX_JRE _PATH <J2SE JRE Installation Directory>
   ```

   b. Source the .cshrc file:

   ```
   source .cshrc
   ```

Once you have J2SE JRE 1.3 or higher installed, the next step is to install ArcIMS Viewer.

Installing ArcIMS Viewer on a remote Linux Red Hat computer

Internet clients only

1. Once you have installed J2SE JRE and configured JPI, close your browser to clear the cache and reopen it.
2. Type the URL to the ArcIMS Web site:

   ```
   http://<host name>/Website/<name>/default.htm
   ```

3. At the ESRI ArcIMS Viewer screen, click Start installer for Linux.
4. The ArcIMS Viewer installer is automatically downloaded to your $HOME directory. The Viewer installer: AEJava.bin is saved under $HOME/IA_Installers/ESRI_ArcIMS_Viewer directory. The Viewer installer is automatically executed.
5. At the language screen, choose a language and click OK.
6. At the Location of J2SE JRE screen, choose the location where you installed J2SE JRE 1.3 or higher. This should be the same as what your $NPX_JRE _PATH variable is set to in Step 4 of Installing J2SE JRE 1.3 or higher on a remote Linux computer. Click Next.

   Note: You must have write access to the lib and bin directories in JRE.

7. At the Introduction screen, click Next.
8. At the Installation Directory screen, choose the installation directory and click Install. The installer creates a directory called AEJava4.0 at this location.
9. **Note:** The Viewer JAR files and libraries are installed directly into the J2SE JRE directory that you selected in Step 8. See the install.log file located in AEJava/UninstallerData for a list of where each file is copied.
10. At the Install Complete screen, click Done.

11. Close the browser to clear the cache, and reopen it.

You are now ready to view ArcIMS Web pages created using the Java Standard Viewer. Proceed to Setting up ArcExplorer—Java Edition on a remote UNIX/Linux computer.

Intranet clients only

Check with your ArcIMS system administrator if you do not know what $AEJHOME should be set to.

1. Copy the Viewer *.jar files to your J2SE JRE ext directory:

   ```
   cp $AEJHOME/lib/*.jar $NPX_JRE _PATH/lib/ext
   ```

2. Add $AEJHOME/lib to your LD_LIBRARY_PATH in your .cshrc file:

   ```
   setenv LD_LIBRARY_PATH $AEJHOME/lib:$LD_LIBRARY_PATH
   ```

You are now ready to view ArcIMS Web pages created using the Java Standard Viewer. Proceed to Setting up ArcExplorer—Java Edition on a remote UNIX/Linux computer.

Setting up ArcExplorer—Java Edition on a remote UNIX/Linux computer

Intranet and Internet clients

Check with your ArcIMS system administrator if you do not know what $AEJHOME should be set to.

1. To enable ArcExplorer—Java Edition, set the following variable in your .cshrc file:

   ```
   setenv AEJHOME <ArcExplorer Installation Directory>/aej40exe
   ```

2. In your .cshrc file, add $AEJHOME/bin to your $PATH variable or set an alias to the startup script:

   ```
   set path = ( $path $AEJHOME/bin )
   ```

   or

   ```
   alias aejava $AEJHOME/bin/aejava
   ```

3. To enable ArcExplorer—Java Edition Help, copy the aimsclient.properties file from <ArcExplorer Installation Directory>/Xenv to your $HOME directory, open the file in a text editor, and edit the values for:

   ```
   WebBrowser=<Netscape Installation Directory>/netscape
   AEJavaHelp=<ArcExplorer Installation Directory>/aej40exe/Help/aejava_help.htm
   ```

   Save and close the file.

4. Source your .cshrc file:

   ```
   source .cshrc
   ```

5. To start ArcExplorer—Java Edition, type:

   ```
   aejava
   ```

You can now use ArcExplorer—Java Edition to view local data and ArcIMS services.

Note: If your remote IBM AIX computer accesses an ArcIMS Web site created using the Java Standard Viewer on Windows or Solaris, then you will encounter the following warning message: 'You need a font named Arial to view data from this server.' Click OK. This is just a warning message, and it should not affect the functionality of the Java Standard Viewer.

Note: If your remote Windows computer accesses an ArcIMS Web site created using the Java Custom Viewer on SGI IRIX, then you will encounter the following warning message: 'You need a font named Helvetica to view data from this server.' Click OK. This is just a warning message, and it should not affect the functionality of the Java Custom Viewer.

Installing ArcIMS Viewer on Microsoft Windows

To install ArcIMS Viewer on Windows 98, Windows NT, Windows 2000, or Windows XP, see the instructions for your Web browser.

- Installing ArcIMS Viewer on Internet Explorer 5.0
- Installing ArcIMS Viewer on Internet Explorer 5.5 and 6.0
- Installing ArcIMS Viewer on Netscape

Installing ArcIMS Viewer on Internet Explorer 5.0 on Microsoft Windows

To install ArcIMS Viewer on Windows 98, Windows NT, Windows 2000, or Windows XP,

1. Type the URL to the ArcIMS Web site:

   ```
   http://<host name>/Website/<name>
   ```

   Note: If you do not have the correct Java Plug-in, you will be prompted to install Java 2 Runtime Environment, otherwise skip to Step 6.
2. At the Security Warning screen for Java Plug-in 1.3.1, click Yes.
3. At the Locale selection screen, click Install.
4. At the Software License Agreement screen, click Yes.
5. At the Choose Destination Location screen, click Next. J2SE JRE 1.3.1 is installed on your computer, and the ArcIMS Viewer installation begins.

   Note: You may see Steps 6 and 7, otherwise skip to Step 8.
6. Install on Demand displays if Java Virtual Machine is needed, click Download.
7. A Security Warning for Microsoft Virtual Machine displays. Click Yes.
8. At the Security Warning screen for InstallAnywhere Web Installer, click Yes.
9. Click Start Installer for Windows.
10. At the language screen, choose English and click OK.
11. At the Welcome screen, click Next.
12. At the J2SE JRE and Java Plug-in screen, click Next.
13. At the Installation Directory screen, click Next.
14. At the Location of J2SE JRE screen, highlight the correct path and click Install.
15. At the Summary screen, click Next.
16. At the Install Complete screen, click Done.
17. Close your browser to clear the cache and reopen it.
18. Type the URL to the Web site:

    ```
    http://<host name>/Website/<name>.
    ```

Now you can access the ArcIMS Web site.

Note: If you receive the following error message, 'Problem in opening a connection to the installer on the Server. It is possible that the installer cannot be found or has a different name,' tell your ArcIMS system administrator to refer to the instructions for Configuring your iPlanet Web server for ArcIMS Viewer.

Uninstalling ArcIMS Viewer

To uninstall ArcIMS Viewer,

1. Click Start > Settings > Control Panel and double-click Add/Remove Programs on Windows NT, or Change/Remove on Windows 2000; or click Start > Control Panel and double-click Add or Remove Programs on Windows XP.
2. Click ArcGIS ArcIMS Viewer and click Add/Remove on Windows NT or Change/Remove on Windows 2000 or Windows XP.

Installing ArcIMS Viewer on Internet Explorer 5.5 or 6.0 on Microsoft Windows

To install ArcIMS Viewer on Windows 98, Windows NT, Windows 2000, or Windows XP,

1. Type the URL to the ArcIMS Web site:

   ```
   http://<host name>/Website/<name>
   ```

   Note: If you do not have the correct Java Plug-in, you will be prompted to install Java 2 Runtime Environment, otherwise skip to Step 6.
2. At the Security Warning screen for Java Plug-in 1.3.1, click Yes.
3. At the Locale selection screen, click Install.
4. At the Java 2 Runtime Environment Software License Agreement screen, click Yes.
5. At the Choose Destination Location screen, click Next. J2SE JRE 1.3.1 is installed on your computer, and the ArcIMS Viewer installation begins.

   Note: You may see Steps 6 and 7, otherwise skip to Step 8.
6. Install on Demand displays if Java Virtual Machine is needed, click Download.
7. A Security Warning for Microsoft Virtual Machine displays. Click Yes.
8. At the Security Warning screen for InstallAnywhere Web Installer, click Yes.
9. Click Start Installer for Windows.
10. At the language screen, choose English and click OK.
11. At the Welcome screen, click Next.
12. At the J2SE JRE and Java Plug-in screen, click Next.
13. At the Installation Directory screen, click Next.
14. At the Location of J2SE JRE screen, highlight the correct path and click Install. If you do not highlight the path, the ArcIMS Viewer installation will not be complete.
15. At the Summary screen, click Next.
16. At the Install Complete screen, click Done.
17. Close your browser to clear the cache and reopen it.
18. Type the URL to the Web site:

    ```
    http://<host name>/Website/<name>
    ```

Now you can access the ArcIMS Web site.

Note: If you receive the following error message, 'Problem in opening a connection to the installer on the Server. It is possible that the installer cannot be found or has a different name,' tell your ArcIMS system administrator to refer to the instructions for Configuring your iPlanet Web server for ArcIMS Viewer.

Uninstalling ArcIMS Viewer

To uninstall ArcIMS Viewer,

1. Click Start > Settings > Control Panel and double-click Add/Remove Programs on Windows NT, or Change/Remove on Windows 2000; or click Start > Control Panel and double-click Add or Remove Programs on Windows XP.
2. Click ArcGIS ArcIMS Viewer and click Add/Remove on Windows NT or Change/Remove on Windows 2000 or Windows XP.

Installing ArcIMS Viewer on Netscape 4.75 or 6 on Microsoft Windows

To install ArcIMS Viewer on Windows 98, Windows NT, Windows 2000, or Windows XP,

1. Type the URL to the ArcIMS Web site:

   ```
   http://<host name>/Website/<name>
   ```

   Note: If you do not have the correct Java Plug-in, you will be prompted to install Java 2 Runtime Environment, otherwise skip to Step 5.
2. At the Plug-in not loaded screen, click Get the Plug-in.
3. After being directed to the Java Web site, you will be prompted to download Java 2 Runtime Environment. Follow the instructions. (If you are not automatically prompted to download, click the download link for Windows on the Java 2 Runtime Page.)
4. Install JRE.
5. Type the URL to the ArcIMS Web site:

   ```
   http://<host name>/Website/<name>
   ```
6. On Netscape 6.0, at the Java Plug-in security warning, select Grant this session.

   On Netscape 4.75, at the Java Security screen, select Grant.
7. Click Start Installer for Windows.
8. At the language screen, choose English and click OK.
9. At the Welcome screen, click Next.
10. At the J2SE JRE and Java Plug-in screen, click Next.
11. At the Installation Directory screen, click Next.
12. At the Summary screen, click Next.
13. At the Location of J2SE JRE screen, highlight the correct path and click Install.
14. At the Install Complete screen, click Done.
15. Close your browser to clear the cache and reopen it.
16. Type the URL to the Web site:

    ```
    http://<host name>/Website/<name>
    ```

Now you can access the ArcIMS Web site.

Note: If you receive the following error message, 'Problem in opening a connection to the installer on the Server. It is possible that the installer cannot be found or has a different name,' tell your ArcIMS system administrator to refer to the instructions for Configuring your iPlanet Web server for ArcIMS Viewer.

Uninstalling ArcIMS Viewer

To uninstall ArcIMS Viewer,

1. Click Start > Settings > Control Panel and double-click Add/Remove Programs on Windows NT, or Change/Remove on Windows 2000; or click Start > Control Panel and double-click Add or Remove Programs on Windows XP.
2. Click ArcGIS ArcIMS Viewer and click Add/Remove on Windows NT or Change/Remove on Windows 2000 or Windows XP.

Installing ArcIMS Viewer on SGI IRIX

The ArcIMS Host computer runs the ArcIMS Web site, and the ArcIMS remote computer accesses the Web site from a Web browser via the Intranet or Internet.

An Intranet client has NFS access to the ArcIMS Host, and an Internet client has only HTTP access.

Note: ArcIMS Web sites created using the Java Custom Viewer cannot be viewed from an IRIX remote computer.

To view ArcIMS Web sites created using the ArcIMS Java Standard Viewer, the following components must be installed on the remote computer:

- J2SE JRE 1.3.1 (the Java Plug-in is included with JRE)
- ArcIMS Viewer

If the remote computer has ArcExplorer—Java Edition installed, the J2SE JRE and ArcIMS Viewer are already available on it. If not, Internet clients are prompted to install these via the ArcIMS Viewer installation. Intranet clients can copy the necessary components to their computer. See Installing ArcIMS Viewer on a remote IRIX computer.

There are four steps required to set up a remote ArcIMS Viewer.

1. Set up the ArcIMS Host computer on UNIX/Linux.
2. Install the J2SE JRE 1.3.1 on a remote SGI IRIX computer.
3. Install ArcIMS Viewer on a remote SGI IRIX computer.
4. Set up ArcExplorer—Java Edition on a remote UNIX/Linux computer.

The steps have different instructions for Internet and Intranet clients, where appropriate.

Setting up the ArcIMS Host computer on UNIX/Linux

To provide Internet clients with the ability to download the ArcIMS Viewer from an ArcIMS Web site, the ArcIMS Web site Administrator must do the following:

```
cp -r $AIMSHOME/ViewerDownLoad/install <path to your ArcIMS Website directory>
```

For information on the ArcIMS Website directory specific to the type of Web server you are using, see Configuring your Web server for HP-UX, IBM AIX, Linux Red Hat, SGI IRIX, or Sun Solaris.

If you are using iPlanet Web server, you must make changes to support the use of ArcIMS Viewer. See the instructions for Configuring your iPlanet Web server for ArcIMS Viewer.

Once you have set up the ArcIMS Host computer, the next step is to install J2SE JRE 1.3 or higher on a remote HP-UX, IBM AIX, Linux Red Hat, SGI IRIX, or Sun Solaris computer.

Installing J2SE JRE 1.3.1 on a remote SGI IRIX computer

Internet clients only

When a remote computer tries to access an ArcIMS Java Standard Web site, the application automatically detects whether the Java Runtime Plug-in is installed. If it does not detect your Java Runtime Plug-in, you need to go to the SGI Web site at http://www.sgi.com/developers/devtools/languages/java.html to download Java Runtime Plug-in 1.3.1.

If you have already installed Java Runtime Plug-in 1.3.1, but it is not detected, the Plug-in may not be configured properly. Skip to Step 4 below for instructions on configuring Java Runtime Plug-in 1.3.1.

Internet and Intranet clients

The URL for the SGI Java Runtime Plug-in 1.3.1 download is http://www.sgi.com/developers/devtools/languages/java.html.

1. Register and follow the instructions to download the Java Runtime Plug-in.
2. ESRI recommends that you increase the Java VM memory parameters. Open the Java Plug-in Control Panel located at <Netscape Installation Directory>/javaplugin/java/ControlPanel.html. Set the required memory parameters in the field named Java Run Time Parameters:

   ```
   -Xms10m –Xmx256m
   ```

   Click Apply.
3. Make sure that you add $JAVA_HOME/bin to LD_LIBRARY_PATH. See system requirements for more information.
4. Configure Java Runtime Plug-in 1.3.1:
   a. Make sure the correct Java Runtime Plug-in is being used. Add the following to your .cshrc file:

      ```
      setenv JAVA_HOME <J2SE JRE Installation Directory>
      set path = ( $JAVA_HOME/bin $path)
      ```

      Source the .cshrc:

      ```
      source .cshrc
      ```

   b. If you have installed Netscape or the Plug-in in a nonstandard location, refer to the SGI Web site at http://www.sgi.com/developers/devtools/languages/java.html for more information.

Once you have Java Runtime Plug-in 1.3.1 installed, the next step is to install ArcIMS Viewer.

Setting up ArcExplorer—Java Edition on a remote UNIX/Linux computer

Intranet and Internet clients

Check with your ArcIMS system administrator if you do not know what $AEJHOME should be set to.

1. To enable ArcExplorer—Java Edition, set the following variable in your .cshrc file:

   ```
   setenv AEJHOME <ArcExplorer Installation Directory>/aej40exe
   ```
2. In your .cshrc file, add $AEJHOME/bin to your $PATH variable or set an alias to the startup script:

   ```
   set path = ( $path $AEJHOME/bin )
   ```

   or

   ```
   alias aejava $AEJHOME/bin/aejava
   ```
3. To enable ArcExplorer—Java Edition Help, copy the aimsclient.properties file from <ArcExplorer Installation Directory>/Xenv to your $HOME directory, open the file in a text editor, and edit the values for:

   ```
   WebBrowser=<Netscape Installation Directory>/netscape
   AEJavaHelp=<ArcExplorer Installation Directory>/aej40exe/Help/aejava_help.htm
   ```

   Save and close the file.
4. Source your .cshrc file:

   ```
   source .cshrc
   ```
5. To start ArcExplorer—Java Edition, type:

```
aejava
```

You can now use ArcExplorer—Java Edition to view local data and ArcIMS services.

Note: If your remote IBM AIX computer accesses an ArcIMS Web site created using the Java Standard Viewer on Windows or Solaris, then you will encounter the following warning message: 'You need a font named Arial to view data from this server.' Click OK. This is just a warning message, and it should not affect the functionality of the Java Standard Viewer.

Note: If your remote Windows computer accesses an ArcIMS Web site created using the Java Custom Viewer on SGI IRIX, then you will encounter the following warning message: 'You need a font named Helvetica to view data from this server.' Click OK. This is just a warning message, and it should not affect the functionality of the Java Custom Viewer.

Installing ArcIMS Viewer on Sun Solaris

The ArcIMS Host computer runs the ArcIMS Web site, and the ArcIMS remote computer accesses the Web site from a Web browser via the Intranet or Internet.

An Intranet client has NFS access to the ArcIMS Host, and an Internet client has only HTTP access.

Note: ArcIMS Web sites created using the Java Custom Viewer cannot be viewed from a Solaris remote computer.

To view ArcIMS Web sites created using the ArcIMS Java Standard Viewer, the following components must be installed on the remote computer:

- J2SE JRE 1.3 or higher (the Java Plug-in is included with JRE)
- ArcIMS Viewer

If the remote computer has ArcIMS Manager or ArcExplorer—Java Edition installed, the J2SE JRE and ArcIMS Viewer are already available on it. If not, Internet clients are prompted to install these via the ArcIMS Viewer installation. Intranet clients can copy the necessary components to their computer. See Installing ArcIMS Viewer on a remote Solaris computer.

There are four steps required to set up a remote ArcIMS Viewer.

1. Set up the ArcIMS Host computer.
2. Install J2SE JRE 1.3 on a remote computer.
3. Install ArcIMS Viewer on a remote Solaris computer.
4. Set up ArcExplorer—Java Edition on a remote computer.

The steps have different instructions for Internet and Intranet clients, where appropriate.

Setting up the ArcIMS Host computer on UNIX/Linux

To provide Internet clients with the ability to download the ArcIMS Viewer from an ArcIMS Web site, the ArcIMS Web site Administrator must do the following:

```
cp -r $AIMSHOME/ViewerDownLoad/install <path to your ArcIMS Website directory>
```

For information on the ArcIMS Website directory specific to the type of Web server you are using, see Configuring your Web server for HP-UX, IBM AIX, Linux Red Hat, SGI IRIX, or Sun Solaris.

If you are using iPlanet Web server, you must make changes to support the use of ArcIMS Viewer. See the instructions for Configuring your iPlanet Web server for ArcIMS Viewer.

Once you have set up the ArcIMS Host computer, the next step is to install J2SE JRE 1.3 or higher on a remote HP-UX, IBM AIX, Linux Red Hat, SGI IRIX, or Sun Solaris computer.

Installing J2SE JRE 1.3 or higher on a remote Sun Solaris computer

Internet clients only

When a remote Solaris computer tries to access an ArcIMS Java Standard Web site, the application automatically detects whether the J2SE JRE and the Plug-in are installed. If not, the browser is redirected to the Sun Web site to download J2SE JRE 1.3. If you have already installed J2SE JRE 1.3 but still receive the redirect message, the Plug-in may not be configured properly. Skip to Step 4 below for instructions on configuring J2SE JRE 1.3 and the Plug-in.

Note: If you use J2SE JRE 1.3.1, you need to install the required Sun OS patches listed on the java.sun.com Web site for Solaris: http://java.sun.com/j2se/1.3/install-solaris-patches.html.

Internet and Intranet clients

The URL for the Sun J2SE JRE 1.3 download is http://java.sun.com/j2se/1.3/.

1. Register and follow the instructions to download and install JRE.
2. ESRI recommends that you increase the Java VM memory parameters. Open the Java Plug-in Control Panel and set the required memory parameters in the field named Java Run Time parameters to

   ```
   -Xms10m -Xmx256m
   ```

   and click Apply.

   The Java Plug-in Control Panel is located at <J2SE JRE Installation Directory>/bin/ControlPanel.
3. Execute the J2SE JRE script for Solaris.

   Note: Be sure to check the Solaris patch requirements for the JPI and J2SE JRE prior to installing these components.
4. Configure J2SE JRE 1.3:

   a. Make sure the correct J2SE JRE is being used. Add the following to your .cshrc file:

   ```
   setenv JAVA_HOME <J2SE JRE Installation Directory>
   set path = ( $JAVA_HOME/bin $path)
   ```

   For Netscape to use the correct Plug-in, add the following variables to your .cshrc file:

   ```
   setenv NPX_PLUGIN_PATH <J2SE JRE Installation Directory>/plugin/sparc/ns4
   setenv NPX_JRE _PATH <J2SE JRE Installation Directory>
   ```

   b. Source the .cshrc file:

   ```
   source .cshrc
   ```

Once you have J2SE JRE 1.3 installed, the next step is to install ArcIMS Viewer.

Installing ArcIMS Viewer on a remote Sun Solaris computer

Internet clients only

1. Once you have installed J2SE JRE and configured JPI, close your browser to clear the cache and reopen it.
2. Type the URL to the ArcIMS Web site:

   ```
   http://<host name>/Website/<name>/default.htm
   ```
3. At the ESRI ArcIMS Viewer screen, click Download installer for UNIX.
4. The ArcIMS Viewer installer is automatically downloaded to your $HOME directory. The Viewer installer: AEJava.bin is saved under $HOME/IA_Installers/ESRI_ArcIMS_Viewer directory. The Viewer installer is automatically executed.
5. At the language screen, choose a language and click OK.
6. At the Location of J2SE JRE screen, choose the location where you installed J2SE JRE 1.3. This should be the same as what your $NPX_JRE _PATH variable is set to in Step 4 of Installing J2SE JRE 1.3 or higher on a remote Solaris computer. Click Next.

   Note: You must have write access to the lib and bin/sparc directories in JRE.
7. At the Introduction screen, click Next.
8. At the Installation Directory screen, choose the installation directory and click Install. The installer creates a directory called AEJava4.0 at this location.

Note: The Viewer JAR files and libraries are installed directly into the J2SE JRE directory that you selected in Step 8. See the install.log file located in AEJava/UninstallerData for a list of where each file is copied.

9. At the Install Complete screen, click Done.
10. Close the browser to clear the cache, then reopen it.

You are now ready to view ArcIMS Web pages created using the Java Standard Viewer. Proceed to Setting up ArcExplorer—Java Edition on a remote UNIX/Linux computer.

Intranet clients only

Check with your ArcIMS system administrator if you do not know what $AEJHOME should be set to.

1. Copy the Viewer *.jar files to your J2SE JRE ext directory:

   ```
   cp $AEJHOME/lib/*.jar $NPX_JRE _PATH/lib/ext
   ```

2. Add $AEJHOME/lib to your LD_LIBRARY_PATH in your .cshrc file:

   ```
   setenv LD_LIBRARY_PATH $AEJHOME/lib:$LD_LIBRARY_PATH
   ```

You are now ready to view ArcIMS Web pages created using the Java Standard Viewer. Proceed to Setting up ArcExplorer—Java Edition on a remote UNIX/Linux computer.

Setting up ArcExplorer—Java Edition on a remote UNIX/Linux computer

Intranet and Internet clients

Check with your ArcIMS system administrator if you do not know what $AEJHOME should be set to.

1. To enable ArcExplorer—Java Edition, set the following variable in your .cshrc file:

   ```
   setenv AEJHOME <ArcExplorer Installation Directory>/aej40exe
   ```

2. In your .cshrc file, add $AEJHOME/bin to your $PATH variable or set an alias to the startup script:

   ```
   set path = ( $path $AEJHOME/bin )
   ```

   or

   ```
   alias aejava $AEJHOME/bin/aejava
   ```

3. To enable ArcExplorer—Java Edition Help, copy the aimsclient.properties file from <ArcExplorer Installation Directory>/Xenv to your $HOME directory, open the file in a text editor, and edit the values for:

   ```
   WebBrowser=<Netscape Installation Directory>/netscape
   AEJavaHelp=<ArcExplorer Installation Directory>/aej40exe/Help/aejava_help.htm
   ```

   Save and close the file.

4. Source your .cshrc file:

   ```
   source .cshrc
   ```

5. To start ArcExplorer—Java Edition, type:

   ```
   aejava
   ```

You can now use ArcExplorer—Java Edition to view local data and ArcIMS services.

Note: If your remote IBM AIX computer accesses an ArcIMS Web site created using the Java Standard Viewer on Windows or Solaris, then you will encounter the following warning message: 'You need a font named Arial to view data from this server.' Click OK. This is just a warning message, and it should not affect the functionality of the Java Standard Viewer.

Note: If your remote Windows computer accesses an ArcIMS Web site created using the Java Custom Viewer on SGI IRIX, then you will encounter the following warning message: 'You need a font named Helvetica to view data from this server.' Click OK. This is just a warning message, and it should not affect the functionality of the Java Custom Viewer.

Configuring Sun ONE 6.0 (iPlanet) for ArcIMS Viewer

The following instructions are for iPlanet only.

If you use iPlanet, you need to make a change in the configuration of the MIME type property. The MIME type file tells the Web server what to do when an incoming request is looking for a particular file extension.

1. Start iPlanet Administration Server from the Start menu or from your Web browser.
2. Type your user name and password and click OK.
3. Select your Server from the drop-down list and click Manage.
4. In the left sidebar, click Mime Types.
5. Select the Edit option and click OK. Click OK again.
6. On the Global Mime Types list, find `Content-Type: application/octet-stream File Suffix: bin`
7. Click Edit and add `,exe` to the File Suffix.
8. Click Change MIME Type and OK to update the record.
9. Scroll down and find `Content-Type: magnus-internal/cgi File Suffix: cgi,exe,bat`
10. Click Edit and Remove `exe,` from the File Suffix.
11. Click Change MIME Type and OK to update the record.
12. Click Apply in the upper right corner.
13. Select Apply changes to stop and start the Web server.
14. Exit Sun ONE 6.0 (iPlanet).